SEQUENCE LISTING

<110> Sun, Yongming
       Recipon, Herve
       Ghosh, Malavika
       Liu, Chenghua

<120> Compositions and Methods Relating to Colon Specific Genes and
Proteins

<130> DEX-0255

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<141> 2001-10-31

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<151> 2000-10-31

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<170> PatentIn version 3.1

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atctaaaaat tttaataaaa tagaacctta aagggagaaa aatcacaccg tgagcccaag     180

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atgtttattt attttttttt aatggagtct tgctctggtt gcactccagc ctgggtgaca      480

cgacgtgaga ctctgtctca aaaacagact taaaaccctt taaaagtgtg tgataaacat      540

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cgaggggaga tcagctctcc cgcaacctgg tgccgctctc tgacagcaca acagaaccta      180

aggggctaca ggatgattca aggaacagtg tgctacagga cctcggtatt cctgctgaga      240

gtcatttcct gtgctggatt taccatcaca gggaccagat ttatagaaaa atgaacatgt      300

attgttgcta aatggagttg gtcatggagt ggaaactaac aatatgttca cctaaatgtg      360

ctacaaccac tcaaggtctg caaacagatt cctatttaga tgttgttgag agctgaattt      420
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cgaggggaga tcagctctcc cgcaacctgg tgccgctctc tgacagcaca acagaaccta   180

aggggctaca ggatgattca aggaacagtg tgctacagga cctcggtatt cctgctgaga   240

gtcatttcct gtgctggatt taccatcaca gggaccagat ttatagaaaa atgaacatgt   300

attgttgcta aatggagttg gtcatggagt ggaaactaac aatatgttca cctaaatgtg   360

ctacaaccac tcaaggtctg caaacagatt cctatttaga tgttgttgag agctgaattt   420

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aatattctag aaaataacaa gcttatgaca ggaatactat atcagagtca agagaaaaca   180

aaagtatagg taaagactga atttatcata gcccaagaca aggagcagga actgacattt   240

agtcaacagt atttattgag tccctactat gtgtgccaaa ataaaaaatt aactaagtac   300

tgggtaacag ataaagaaat gattatgaaa gctggcaaat aggaagtgag agatgaaact   360

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ctgagttgtg gcaagatatc ctgtttttg tacttacagg tattcctgct gagagtcatt   480

tcctgtgctg gatttaccat cacagggacc agatttatag aaaaatgaac atgtattgtt   540

gctaaatgga gttggtcatg gagtggaaac taacaatatg ttcacctgta agtttttaag   600

tgctgtgcca agaaagcctc tttggaggcc attgccataa tctactgttt acatttgtgc   660

atttagtttc cgggaaatat tttttaaacc tatcctagga gctattcaga accatagagg   720

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ttgttaagac ttacccgctc ataaatgttt tattacatac ttaatatgtg aagctatcaa     180

gtaaggaggt aaggaagtat gttaataggg aagaagatga taaaataccc aaataggaaa     240

ccataatgcc aactttctaa gcttaagctg actgtaacaa agaactggct ttgtaacaaa     300

gaacaagtct tactggcttc atgcaatgca aacatttttt tcttacgtat ctgacagatc     360

aaggtggtca ggtagctctc ctgagcagtt ttccaccatg tggtgattca gggatccaag     420

cacattctat cacgaggctt agccatattg gagtttttca cttcggtgat gaggatgagg     480

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tctcctcctc agtaaatagg atactagtga taacatcttc atagagttgt catgagaatt     180

aaatgaataa tatatgtaaa ggcttaaatc agcacctgga ctacatatat aaggtgatca     240

ataaatatct actttggtat ctgaatgctt caagatagcc ttttgttccc ttctaaaaaa     300

gagtgggtag tgattgttaa gacttacccg ctcataaatg ttttattaca tacttaatat     360

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cccaaatagg aaaccataat gccaactttc taagcttaag ctgactgtaa caaagaactg     480

gctttgtaac aaagaacaag tcttactggc ttcatgcaat gcaaacattt ttttcttacg     540

tatctgacag atcaaggtgg tcaggtagct ctcctgagca gttttccacc atgtggtgat     600

tcagggatcc aagcacattc tatcacgagg cttagccata ttggagtttt tcacttcggt     660

gatgaggatg agggagaaag tgggagagag tgaaaagagg gagaaaggtg gaaaagggag     720

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acagaaaatc ttgagcttgc agaataacag aaaagaaaaa aaaaacaaaa acacaacttg     300

ccaaaacact gaaactccct ctacttatga aataaacaaa ctggcttaaa ttgggtggaa     360

tcattatggc caaatggtgt ttgggcagaa tcaccttgct gaggtcaccg tctgaatttt     420

cactgcctgt ttcatcacaa ctccccttca gtttgcccat gacatccatg aggaggcaat     480

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atgggctact agcacttc                                                   558
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tgacaattag atcagcagct aagataaatt tcagtttgca gccccaaaga agatgttctt     360

aattagacag ttaatcattt tcaatatgga agcctaaaca cgtagaatgt ggcaataacc     420

cggaactctc agttctgaca attgagtgaa gtaatcaccc cagattcagg ttcttcattg     480

gctgacaatg agatcaaaca cccacaccag cccagtgaac accatgaggt gtcatcttcc     540

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gttctaaagt atgcactatt ctccccctca gcacagccct ttgggccttt tacacaatgg     540

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tctgtgaggg ccgtaacccc agggtataag taactcaact agaatatgtg caatacactt    1080

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aaatctgagt cagatgcctc ttgaagaatg gacttctgag gagcaccgta ctcgccccag      960

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tctgtgaggg ccgtaacccc agggtataag taactcaact agaatatgtg caatacactt     1080

ctctgtgtcc tgatgttaaa cttaaaatga aatagttttc agaataaaaa taaatttgta     1140

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aagtaattta ttattttnat ttatnattat naccattatt attaacaact ttgtgaacaa      180

aagcatttat ttaaatgttt tatggttatt tgtattctct atttgtagga ttcaaagttt      240

tatattcaac ttattgagat tattatagaa atgaggtata tttgagaggg tcaaatattc      300

taaaagaata tttcagacac cacctcctcc agcaacaaaa atagctacaa accaatataa      360
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aagtaattta ttattttnat ttatnattat naccattatt attaacaact ttgtgaacaa   180

aagcatttat ttaaatgttt tatggttatt tgtattctct atttgtagga ttcaaagttt   240

tatattcaac ttattgagat tattatagaa atgaggtata tttgagaggg tcaaatattc   300

taaaagaata tttcagacac cacctcctcc agcaacaaaa atagctacaa accaatataa   360

atttcatgtt agttattttc atacatattg aaaactttac tgtacattaa aaggttgtac   420

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atattcagta aaaaaaagt cgacgcggcc gcgaatt   517

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tttacagagg gtgtaacttg ggccaagaaa tcgtgatgtg agtaggtcac acagtgttga    180

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cctaataata agcaggtgag gttttgtatt ctcatttttc acagtgcaag anaattttgt    300

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ggaaaggaat tggttttttca ggcagagcgg tactttttta aattgacaaa ttttaagcat    540

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tccagtgggc ccataggaat ggccctgggg ctgggacttg tggggacggc ggccacaaga    960

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cgggcacacc ctggacagac ctgggtgaga ggtgggctgg gacgccagga cagtgaaggg   1140

cttcaaggtg tgtttgtcct ttgtccttat acaggtgacc tgcatgggcg ggtgaggtcc   1200
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gtgaatcggg gcagtggggg gacttcatgg ttagaaacac aagctggagg ccggatgcgg   1860

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tgtggcaggc acctgtaatc ccagctactt gggaggctga ggcaggaaaa tcacttgaac   2040

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<213> Homo sapiens

<400> 20
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acactggctc tgcctggtgg ttcttctctt cgcataccaa agacagaaat taagcctcca      180

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aacacccctg ttgccactga ttggaattcc aagggtctgg gtgaagtggg gatgggcctc      360

cagcttgcct ccagcctgaa aaaatagtag agggtgttga ggctgggaag ggaggtgggg      420

ctcatgttgt acagggcctg agccagggag cttgggcttc attctgagta ctgtggcagc      480

cctgggaagg tttgtagcac agagggatat tgtcattttt ggaaagatcc ctttggctgc      540

ttaggtagag aagggcttca agagggcagg aagggacagg actacagaag gggctgcttc      600

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<210> 21
<211> 765
<212> DNA
<213> Homo sapiens

<400> 21
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gtggtaactg acctcggtca cacttggtgg gtgtgggaaa ggattcaaat gtaggtctgt      240

tctcttcttc atctatcatg gtccctgtcc tggaggcaag tcgtctgggg ctcagaaaac      300

acccctgttg ccactgattg gaattccaag ggtctgggtg aagtggggat gggcctccag      360

cttgcctcca gcctgaaaaa atagtagagg gtgttgaggc tgggaaggga ggtggggctc      420

atgttgtaca gggcctgagc cagggagctt gggcttcatt ctgagtactg tggcagccct      480

gggaaggttt gtagcacaga gggatattgt catttttgga aagatccctt tggctgctta      540

ggtagagaag ggcttcaaga gggcaggaag ggacaggact acagaagggg ctgcttcaga      600

gtccagatta aggaaggaga ggcctgggca gtcagaaagg aagagaagcc ggatgtggtg      660

gcttgtatct tcaatcccag cactttgag aggccaaggt ggggaggatc actttgagcc      720

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14

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<213>   Homo sapiens

<220>
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<223>   n=a, c, g or t


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caaatgcttt taagatattg tacatctg                                          148


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<212>   DNA
<213>   Homo sapiens

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ctctgattcc tttccttcaa agtgggagat actggtagca tctacctacc ctgcaaggat       180

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<210>   24
<211>   523
<212>   DNA
<213>   Homo sapiens

<400>   24
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tggaatattg ttaaatgttt tagaaagttt gaaattcatt tttaaatgtg aatcattatt       180

gtttgtgtgg ggggaggaat gtcaagttgg aattatgaat caggctttgc cttaccaagt       240

actttttatat taatagggat tattttgaat ttctgtaata cgtatgtatc ctctataata     300

catagagaat gcaaaggaa aataatttga aagctatcct attttatctt gaaagcaatc        360

ttttaaaagc gcattataca tttatttgaa cgcttatttg gaattgtctc ttttccattc       420
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<211> 5982
<212> DNA
<213> Homo sapiens

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<223> n=a, c, g or t

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<223> n=a, c, g or t

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tcaaccctat ccgcaagccc ctctccctac tttctgcgtc cagaccccgt gagggagtgc   240

ctaccactga actgcagata ggggtccctc gccccaggac ctgcccctc ccccggctgt   300

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ggaattcaga ttatataact cttttcaggt tacaaagaac ataaataatc tggtttttctg   1020

atgttatttc aagtactaca gctgcttcta atcttagttg acagtgattt tgccctgtag   1080

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<211> 820
<212> DNA
<213> Homo sapiens

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<223> n=a, c, g or t

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ccagggtctt aagaaatgtg tgtgggtttc ctctgtggct ctgacactcc atcaaacacc    180

aggacttgtg cacgcaggtg agaagcatac ccaggtgcct cagagatatt gaagagggtc    240
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tgccatcact aagacccatt ctgggacaag aggaggctta ccccttattg agtatctgcc    480

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nnnnnnnnnn nnnnnnnnnn nnnnnggcca cccatttcct gacagagatt ggcctacaaa    600

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tcaaggagtg cagaacccat tggtgagatt tacaggaccc cccacccaac cgttagcatg   120

ccgtctgtag catgggaggg gcctggagca tagcagggcc tctcacgggc tttgntttca   180

ggttgacatt t   191

<210> 29
<211> 998
<212> DNA
<213> Homo sapiens

<400> 29
ggccgcatat tttttttttt tttttttttt ttttaaaggt agaaaataac acaacctttt   60

atttttttatt ttcatttgtt ttgagatgga gtttcactct tgtcacccag gctggagtgc   120

aatggtgtga tctcggctca ctgcaacctc cacctcccag gctcaagtga ttctcctgcc   180

ttggcctccc aagtagctgg gattacaggc atgcactaca cgcccagct aatttttgca   240

tttttagtag agatagggtt tcaccatgtt ggccaggctg gtcctcaact cctgacttca   300

ggtgatccat ccatcttggc ctcccaaagt gctgggatta caggcgtgac agctgtgccg   360

ggcccacctt ttaaatgtca acctgaaacc aaagcccgtg agaggccctg ctatgctcca   420

ggcccctccc atgctacaga cggcatgcta acggttgggt gggggtcct gtaaatctca   480

ccaatgggtt ctgcactcct tgaccctgct cttaagcact gaccttcagg agcttgaagc   540

gagaagctgg aacaatgaag tgtctattct gcttcttctt gcaaatgctg caactacaga   600

aagacagagc aaattccaga ttgtgagcag ccacctgcat cctctatgcc tgagcggccc   660

agccatgaga gccagccgac cccacagatg atgccccttt cagcaccatc cagggccgag   720

gagctggggc aaaggcctgg atagcagtgc ctctggtttg caggtacagc agagcccagg   780

ggggtcccaa gtcagcagtc gaggttctgc aatgctcaga acacaggacc aacagacagg   840

tctgtactgc ccacccctca gttctttaca gtgaagagaa gcgctggact tcagagacac   900

ttaggaaaca aatttcagac actgctacaa cctgatgtct ctgagacatc cacaccaaaa   960

atggacaagg aagtctaggt ttccctcttt cttcatca   998

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<210>   30
<211>   282
<212>   DNA
<213>   Homo sapiens

<220>
<221>   misc_feature
<222>   (5)..(5)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
<222>   (17)..(17)
<223>   n=a, c, g or t


<220>
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<223>   n=a, c, g or t


<220>
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<223>   n=a, c, g or t


<220>
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<223>   n=a, c, g or t


<400>   30
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cttaaaaact acacatagaa acagggtaga atggtagtta tccaggctcn ggaggaagag     120

aaaacaannn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn     180

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnngta tatggaaaat ttgctgagag     240

actagatttt aggtattcta cctcaattaa aaaggtaatt gt                       282


<210>   31
<211>   1225
<212>   DNA
<213>   Homo sapiens

<400>   31
ggggaaagac caaccagttg gggctttctc ccagggctcc cgggggctgt gtctgagtgt      60

ctgtgttggc tgtttggttt gctttggttt tgtttctgga ggttgcttgc aggtttttgg     120

aggaagtgac tagtttggtt aagagctggg aactgagtca ggtaagccgt gtcatgttgt     180
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```
aactccacca gaaaatggag gagagcgggt ttccaggaga caaagctgag atgagaagtg      240

tttataaaat tatggatgtc tccattttga agctctgttg gtgatggctg gaggaggagg      300

aggcttgctt gcctactcct tctctctttc cagagggaaa ccttgtggtg gttcctcact      360

gtctattcat tatgcaagga aatgagggct tttaagggtt cctcagattt ttctccacca      420

aagagtgctt tcacaagtta ttgaggcgtt tgtttccatt ttaaagtaaa cttttggaat      480

ttttttttctc cttttgagtg gacctgaagg gttttgacct ccttcaggaa aggcaaggca      540

aaaacttaaa acagttcact gaggtctcac acaactttaa gctgctccag gtctcctgaa      600

agtcaccagg aaatgtgatt tcctccttgt gaagatggtg atggccctaa gctgagattt      660

ttttgagttc tagggtttgg ttatcatcat gttttgatgc attgcaagac tttattgtct      720

gatttgagtt gatttctgca aatataaaaa ataataagaa taatcctgca agatctcaga      780

ggaactctaa gactggctaa caccagtttc tccaggttct ccatttctct tcaggtcgtt      840

ccatttgtat gttaggcctt ctttcagttt ctttgtttcc cctttccctt tccgtcggct      900

aattttttct gtgttctgaa gtactcttaa gtcttcagaa atatcagtat gtcttcttaa      960

caatgtcgct atggaaacaa attttaaaaa catgatgtca gttgagaaaa ccttatgtcc     1020

aggtatcttc accttttttaa ttgggaggaa tttattaatc atgtaggaag acattttgtg     1080

aggataattt gaaaaaagga cccagtgcta ccctagtcca cacacattga tgggagctct     1140

tcacatatta gttttagaga atgtacataa ttgacccaag caaagaacta aatcccgaaa     1200

tgcttcagga atttttaaaa gccaa                                          1225
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<210>  32
<211>  844
<212>  DNA
<213>  Homo sapiens

<400>  32
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attgtttcat catgcatatc aagtttgata tgtagcttaa atttattttg cacacactag      120

aatttgtcct ggttttctag tacctcaagg cagatatgca aaggtgttta ggagacatac      180

tctcagacaa accattatta ttttaaagga tagaacaaaa caatcgctag ttaaggaaga      240

tgttttgtaa taattaaact tgtaattatt tgacttgaaa tatttaatca tttttttggg      300

aaagaatgga tagattttgt taatgttagc actcttaaaa ttaagcagtg gcttttttcc      360

ccgtgtctcc catattctcc ttgtgtttga aacataaaac aaacactaaa cctaagcaaa      420

agttgctggg tttgtttttca taattgaggt gagttttttcc ctcaactatt acaataaaag      480

aaaacttttt atgatttttaa tgataatgtt ttgtggtggg ttaaagacct cctaacaaca      540
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ggggggtttt atacaacaac aagaagtttt taaataattg agttttttaaa gtggaaagca   600

gcagtaaatt aaactagaag gatatatttt atacctagaa ataaataaag ctcaacttgt   660

tttgtaagcc tgttttaaaa atatttaatc atttaatttg tgcaagtata gagttctcct   720

atggcaaaac tataccatca tcttctccaa ttgtgcatgg cagctgtact aagttctgca   780

aaaacaagac atatggatgt gtttcatacc ttctcagaat tggtatatca agacacattt   840

aaat   844

<210>   33
<211>   2483
<212>   DNA
<213>   Homo sapiens

<400>   33
gatctagaac tagtcatcgc gagcggcctt tttttttttt tttttttaaga tggagtttcg   60

ctcttgttgc ccaggttgga gtgcaatggc gcgatcttgg cttactgcaa cctctgcctt   120

gcagttcaag caattctact gcctcagcct ctcaagtagc tgggactata gacattcacc   180

accacaccca gctaattttt tgtattttta gaaaattttg tatatttaga aaaggtttca   240

ccatgttggc caggctggtc ttgcactcct gacctcaggt gatccgccca cctcagcctc   300

ccaaagtgct gggattacag gcctgagcca ctgtgcccag ccctcaagta actcttaaac   360

ctactgaagt tagacaatca ataactgaaa tgacatcatc tttcttgaat gtttaaggaa   420

ataaagttcc ttcttctgac aaactttaag tgtgttcttg atttccttgc ctccctcttc   480

ctctgggagt tttcttccct agctgctcac tttcattatc aacgaaatat tcctcttcac   540

gccttttttac cttataccta caacatgctc agttctctct ctttacaaga aaatataagt   600

tttcaccaac ctatttatca aatttacatc cccctccctt tctacttcct tttgtaaaaa   660

aagagcattc aacctattgt ctgtctccat gccctcacat tatcagtgca agcacccgca   720

actgtggctc tccaccatgt gagctcaacc tatcatcaca actgtatctc ccctaacact   780

catttagatt aagccatttt tcacaagttt ctaaaattat ctcttccatt tctcagtata   840

acccttttctt tcccttcaca gtttcttgaa ccaatctcac tagtccttca acgttcactt   900

ccaaggccac cccgaacaca tcttttcctc ttccctaaat aaattctact ggattctttc   960

tgtttttcac tggaaacttc tcatactcca ttggttcctt tctcatgaca tttattttac   1020

atccctagta ttctggtttc ttacattttt tttcctatct actaaacaat aacttctttg   1080

agaactggac cagtgtctct tatatttata tccctaataa tacttattaa acacgtagtc   1140

tattctcaac attgaattcc atcttatact caaagaataa tactttaaca tagccattgt   1200

tcatagtgta tatataatta agaacacatt ccatattttt cttgagatta tatagtgtta   1260

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aatttttcaa aattatagga tatgatctaa agatatattt taaaactcaa acctgtaatt      1320

ttatcttcag ttatgctata gcatgtacat ttccattctc ttgtcgaagt ttctttcgtt      1380

cctcagcttc tccttcatat ttcctgacgt attgtcttct aagccttcag agaacaaggc      1440

attctaatgt tatcaaggtt ctattcatct atatgtttga ttggggtttt tatgagtaga      1500

gggggttcca cttcatgagt agtgatagac cagcaatcac tatacttgac actaaaccta      1560

aacctggcta taaaatatta ccaatttcta aggggggtatt tatgttgact gtatataaat      1620

ccatttccag agggcttata tttaaatgtg tcttgatata ccaattctga gaaggtatga      1680

aacacatcca tatgtcttgt ttttgcagaa cttagtacag ctgccatgca caattggaga      1740

agatgatggt atagttttgc cataggagaa ctctatactt gcacaaatta aatgattaaa      1800

tatttttaaa acaggcttac aaaacaagtt gagctttatt tatttctagg tataaaatat      1860

atccttctag tttaatttac tgctgctttc cactttaaaa actcaattat ttaaaaactt      1920

cttgttgttg tataaaaacc ccctgttgtt aggaggtctt taacccacca caaaacatta      1980

tcattaaaat cataaaaagt tttcttttat tgtaatagtt gagggaaaaa ctcacctcaa      2040

ttatgaaaac aaacccagca acttttgctt aggtttagtg tttgtttttat gtttcaaaca      2100

caaggagaat atgggagaca cggggaaaaa agccactgct taattttaag agtgctaaca      2160

ttaacaaaat ctatccattc tttcccaaaa aaatgattaa atatttcaag tcaaataatt      2220

acaagtttaa ttattacaaa acatcttcct taactagcga ttgttttgtt ctatccttta      2280

aaataataat ggtttgtctg agagtatgtc tcctaaacac ctttgcatat ctgccttgag      2340

gtactagaaa accaggacaa attctagtgt gtgcaaaata aatttaagct acatatcaaa      2400

cttgatatgc atgatgaaac aatttttatg tgtcatgtta tgatgatctc atctaaattt      2460

aaaataattg tcaccatggc aga                                             2483
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<210> 34
<211> 591
<212> DNA
<213> Homo sapiens

<400> 34
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aatccattta aagtcaacta aatgttattt gggtaatatg tccctcatgt taaatttgcc        60

caaatatata tctcacctct taaaattcgt ttagtttgaa attaaaatta gtattgtttt       120

tctgcatgta ctcctaggtt gggtaaagaa gggaacaagg gaatggggaa acgtagagat       180

tcctggacta acagagaaag acagcttgag aataaaagta tgcaaaagat aatctacaac       240

aaaataatgc acttaactct tgttactaaa caaataagct acccacattt cagcttatct       300

gtatttgttt catgatttgt cagctatcta gcaactatct tagtcactga ttcggaacga       360
```

```
cttagcagtg gttattgcat agaacaactc cttacacaga gatttgcaag ctttctgaac    420

tttcgtactt tcaaattgaa aatcaggaga aacattttca acggcttcat attcagacca    480

agattagtat attaacaact aataacaata ttaaaagtta gaacaattcc tttcctctat    540

ctttctcagg acaaactcga gcttattaga aaactaggga gtgatctggt g            591
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<210>   35
<211>   306
<212>   DNA
<213>   Homo sapiens

<400>   35
cctagggaga atcagcaagg aaaagatcaa tgtaatcttg aataacttat cctgaaactt     60

ctccagagtt acccagagag tcaacagtca tgctgctttt tgtacttagt ctggtgtttc    120

agtaccagtt taacacataa aaagtgatca aggtgcaagg acacagctt tgaaatagtc     180

agacctggat ctgaatctgt gattctgtca tctgcaataa gtttctaact tctccaagcc    240

ttagtttttt atctgtaaag gggagtatta actagagatg aggattaaat gaaaagtcac    300

ttactc                                                             306
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<210>   36
<211>   617
<212>   DNA
<213>   Homo sapiens

<400>   36
ccaagactga gttagatttt ctattatgta ctcccatggc aacagcattt tccacttaac     60

ttgttggaaa agggacaact gtcctctggg ggctctgttg ccaatatttg ttccactttc    120

tctttcattt tcactttctt ccttacactt gcaatccaga gtccagatgt aaaacagtgt    180

agggccataa gtgatgggac atctctaaca aaattcttgg aggctgctgc ctggaaactt    240

gtgtccttgg gatggtaccc ttacccctga ggtgctaggg atgggcccca gggtctttcc    300

ctgctttcta ctttcctaat ggctaagtga tgtcagagga caacatcttg atgtgtagag    360

gtacaagaat tcagggatgc aaggatgcct tcctgcaaga cagagatcat tctatctaaa    420

ccaatgtttt caggtttttt actaggagca catgcatgaa tgtgtatata tgtgtatagc    480

tatgcaaaaa catgaacaga tgtatgcatg tgtataatct aaaacacata aaggtacata    540

tactgacata ctgaaacaca tattaatata accaaaaata aaaatttcat gagacagtat    600

taatgtttac cacatgc                                                  617
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<210>   37
<211>   725
<212>   DNA
<213>   Homo sapiens
```

<400> 37
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ccaagactga gttagatttt ctattatgta ctcccatggc aacagcattt tccacttaac     60

ttgttggaaa agggacaact gtcctctggg ggctctgttg ccaatatttg ttccactttc    120

tctttcattt tcactttctt ccttacactt gcaatccaga gtccagatgt aaaacagtgt    180

agggccataa gtgatgggac atctctaaca aaattcttgg aggctgctgc ctggaaactt    240

gtgtccttgg gatggtaccc ttacccctga ggtgctaggg atgggcccca gggtctttcc    300

ctgctttcta ctttcctaat ggctaagtga tgtcagagga caacatcttg atgtgtagag    360

gtacaagaat tcagggatgc aaggatgcct tcctgcaaga cagagatcat tctatctaaa    420

ccaattgttt tcaggttttt tactaggagc acatgcatga atgtgtatat atgtgtatag    480

ctatgcaaaa acatgaacag atgtatgcat gtgtataatc taaaacacat aaaggtacat    540

atactgacat actgaaacac atattaatat aaccaaaata aaaatttcat gagacagtat    600

taatgttaac cacatgctat atacttatat ttttctttca tttgcaaaag aatgctgtta    660

tgactgtcta aacctctggc ttgagaaaaa aaaaaaaaaa aaaagatct ttaattaagc    720

gtgcc                                                                725
```

<210> 38
<211> 90
<212> DNA
<213> Homo sapiens

<400> 38
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gtaaaatatc tgtctcactg gcaatttttt ttacattgaa tttgttgaca attttttttac     60

attgaatatg ttaaaatttt tatatattgg                                      90
```

<210> 39
<211> 222
<212> DNA
<213> Homo sapiens

<400> 39
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tgtagagatg ggatctctct ttgttgcccg ggctggtctg gaattctctg ggttcaggtg     60

atcctgctac gtcagccatg agccacggtg cccagcctgg caggcttggt ttctcttaat    120

gcctctcctt ggcttgcaag atggccacct tctggctgtg tcctctctct catggccttt    180

cctttgtggg cacacatcct tgttctctcc ttcttcttat aa                       222
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<210> 40
<211> 257
<212> DNA
<213> Homo sapiens

<400> 40

gttttcccat tgactaacgc ttaagatata ttggagtcaa atgctcataa aatgctcatc   60

caatgcttat aaaatattag agttgaaatg gactctctgt tcatgcagat gatgagaccg   120

aaacagagag cttccaggag gatcaatgcc attcaatgag cttgctgctg tactcccctc   180

tacacaatat ggatatatcc catcccagcc cgagactggc catactagtt ctagtaactg   240

aggctttcct cctactt   257

<210> 41
<211> 263
<212> DNA
<213> Homo sapiens

<400> 41
gctcgaggtt ttcccattga ctaacgctta agatatattg gagtcaaatg ctcataaaat   60

gctcatcaat gcttataaaa tattagagtt gaaatggact ctctgttcat gcagatgatg   120

agaccgaaac agagagcttc caggaggatc aatgccattc aatgagcttg ctgctgtact   180

cccctctaca caatatggat atatcccatc ccagcccgag actggccata ctagttctag   240

taactgaggc tttcctccta ctt   263

<210> 42
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (501)..(501)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (514)..(514)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (528)..(528)
<223> n=a, c, g or t

<400> 42
atacagagtc gtgttggatt ggcagtctta aatcactctt gttatttcca gtggacatta   60

aaaaaaaatc acagataagt acttaaaaca ctcaagattt gggatttaga tcatgattag   120

atacaataga aagatcctgg aatcccgaca tgaggacaaa aatggtactg aattcttttt   180

gaaaaataga ttactgaaaa gcgatctaat atagaacagt tgcttttact tagatgttca   240

atgcatattt gttgtataat aaccaagtta ttacagttca gataaagggt ccaaagtgtt   300

```
ttcgttatga tataatactt tctattgtaa actggactaa agaaacgttg tatgttcaag    360

gaagtgttga gcagccatgg tgttcctggg acatgctccc caggtgctga gagaggtgct    420

gcaggagtca cagacctgca ggcacgcact tgccagtgac tgggacgttg gctggtggtt    480

ctcttttggt gtgattagag ntatgtgagt tgtntcaata cttgagantg tcg          533
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<210>   43
<211>   676
<212>   DNA
<213>   Homo sapiens

<400>   43
atacagagtc gtgttggatt ggcagtctta aatcactctt gttatttcca gtggacatta     60

aaaaaaaatc acagataagt acttaaaaca ctcaagattt gggatttaga tcatgattag    120

atacaataga aagatcctgg aatcccgaca tgaggacaaa aatggtactg aattcttttt    180

gaaaaataga ttactgaaaa gcgatctaat atagaacagt tgcttttact tagatgttca    240

atgcatattt gttgtataat aaccaagtta ttacagttca gataaagggt ccaaagtgtt    300

ttcgttatga tataatactt tctattgtaa actggactaa agaaacgttg tatgttcaag    360

gaagtgttga gcagccatgg tgttcctggg acaggctccc caggtgctga gagaggtgct    420

gcaggagtca cagacctgca ggcacgcact tgccagtgac tgggacgttg gctggtggtt    480

ctcttttggt gtgattagag ctatgctgta caggaagcat ggctggggag gcctcgggaa    540

acttacaatc atggtgaaag gcaaagggga agcaggtttg tcccataatt cttcgggcct    600

ctctcaagcc ttcgagtgga tgctgtttca tatttcatcc agcctgggag ttggagacct    660

gagctgcatt acctaa                                                    676
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<210>   44
<211>   251
<212>   DNA
<213>   Homo sapiens

<400>   44
caggcctgct cagcaagatt ttcatgggat tagtgaattg gtggttgcca aatgccataa     60

taatgcacca tgcagtagac ttgctgtaaa gcacagtttc atcataacaa taactgtaaa    120

taatgctact gaacagctac agagcactcc tctgaactca ctggaatggg ctatatccca    180

tggcaagatg agtaagcctc aagcgcaaaa atctcaccct tgtttccctt tttttttggc    240

agaaatcccg a                                                         251
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```
<210>   45
<211>   606
<212>   DNA
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<213> Homo sapiens

<400> 45
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agcgcccatg ggattaggga gagcatggcc ttcagaggct ggagctgtag tcctaactgc    60
acagctggtc cagcagggcg taacgcatct acctagagag taaaatgaca acagttgttc   120
cctaagctca gcacttgcaa agaaatcttt tgggaagatc tcttcaaatg tctagaactc   180
tgcgcaaaca ataggtagga caagtgtgaa cctacccaac ctctgttgac aaatacagct   240
gcacacccct cagcgaggcc tgctgtgaaa tgccaccttg gtgaaaatga gaataaaggg   300
tgagtgagcc agctgctttt ggatgaccaa attaattctt agcctcccat taagacaggc   360
ctgctcagca agattttcat gggattagtg aattggtggt tgccaaatgc cataataatg   420
caccatgcag tagacttgct gtaaagcaca gtttcatcat aacaataact gtaaataatg   480
ctactgaaca agctacagag cactcctctg aactcactgg aatgggctat atcccatgca   540
agatgagtaa gcctcaagcg caaaaatctc acccttgttt ccctttttttt ttggcagaaa   600
tcccga                                                              606
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<210>   46
<211>   455
<212>   DNA
<213>   Homo sapiens

<220>
<221>   misc_feature
<222>   (14)..(14)
<223>   n=a, c, g or t

<220>
<221>   misc_feature
<222>   (18)..(18)
<223>   n=a, c, g or t

<220>
<221>   misc_feature
<222>   (16)..(16)
<223>   n=a, c, g or t

<400>   46
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agtgctatgg agagaattaa aggtgagcca tgtaatgtgg ctgaagaatt aggttaaatt   120
gggtgttccc atggcctaag ggggtgacat ttaagttagg gttaacatgg agaggtgagc   180
aggaagagag tttcaaatca tgtgagagct agtcccaatg ccgtaaggag gaaatgggat   240
tggtgtgttt gaggaactga ggaagggcag ctgggagtat ggtacatgaa aaagaccgtg   300
acaaagaata agattgggca catagatggc agttccatct tctcacgttg tatgccaaag   360
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taagaagttc ctaatttact gatagcaatg tgaacccaat gagaaacttt taaaagaaga      420

atgaagccat ctggttaagt atttaaaagt tcatt                                 455
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<210>   47
<211>   367
<212>   DNA
<213>   Homo sapiens

<400>   47
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gcactgtcct gagcgctagg aacagcagca accaggaccg gcagggctca gagcctcccc      120

tgtgtgccaa gaatacagac agcccaggca gagggcattc ggtgctccag acacaaagtg      180

aaggcccagc ttcaaatgtg gctggatcca ggcacacatc ctgaggttct gctggtctgg      240

actgctaacc cactcacgag gatccattct caagcagccc cagcctgtct ccccacctgg      300

gcacgtcatg gctggggtct cttgatgggc aaggctccat tgatcgagtc ccctttggac      360

tggggca                                                               367
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<210>   48
<211>   249
<212>   DNA
<213>   Homo sapiens

<400>   48
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gttttattgt tttcatgcat tcttaggtct tctactgcat gcttcctaaa aacagggtca       60

tcctgtctca gacctttcac tgaactcaaa ctgtgcttct cttgccagtc tcccgatgaa      120

gggcctgcca gggaaataaa cttggttgag acaaaattct tgtaaataag ctcatagagg      180

ggacagactc ctgctccatt cctcccaccc ctcacaaggt cttccaaatt agcggaaaac      240

agtctaaat                                                             249
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<210>   49
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<212>   DNA
<213>   Homo sapiens

<400>   49
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cctttacctt ggcacacaag ggcctccatc ctggggcacc ctcccacctg ccccaccct      120

ccaacctaac tacttgccat ttcccaaata catcgtgcag tgcctggtgt ctatcctgtg      180

gttcatgctg cttcctctgc ctgcaatatc ctttccctgc aatagcctct tccacccagc      240

agacgcctcc tcactctctt ggctcagctc taagtcatat cccctaggga agcttaccag      300

gatgctgcag tcagatggag tgtctcctcc tgggcccca cagaccctgt acttccttct      360
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gtgacagcaa caatcccaca gcagtggaac tgcttacctg cctgagctcc tggagggcaa      420

ggatgccatg ttgctt                                                        436


<210>  50
<211>  853
<212>  DNA
<213>  Homo sapiens

<400>  50
cctggataat aaatgcctaa ctctcaccaa ctaccttgcc atcatgggct tcttcgatca       60

gaaatctagt aagagagtat ggtgggggct gcgagaccca tcatcactac caaaaaacat      120

gaagtctttt cactttcaat atgtgaagac ctaaattatg taattggatg aatgatattt      180

gtagagtcaa agagaatgtg agttctccgt cttatgggta tagttattat gtaataatca      240

agtaatgtgg tcttttattg tcttaatctt tcacaaacca ttgctttcct actccaatag      300

gaagcctgat cagatactag atagctctta tatattgcca atgtatggac tgatgaaact      360

gaggctcaga gaggaagtaa aataaagcat ggctcccccc tactggttta ctatattcca      420

aagttattaa acacctggcc agcactgctg tgtaggttgt acactgcaca attgtgtccc      480

ttctaaggag tcagtgttca aatcacagac atcagagatt tattatgata attttctgg       540

cagatggcag taaagtagct tattctaaca aaattgggaa tataaagact attttctaac      600

agatggaagt agttttttga agcaggtgag ccttttcctg atgctcactc aggtgctaga      660

tggactagca gaaagaatgg cgtcattgat gtccctttgt atgtgttacc cagtttaatc      720

ctggggaatt ttactttttg ctggaaaagg agtcaccctc ccttgccaac cacatgtgtg      780

gttatacatt ggtattgcag agtgatgcca tttacaagta atacatttga gttggcagat      840

ttcccaaggt ttc                                                          853


<210>  51
<211>  383
<212>  DNA
<213>  Homo sapiens

<400>  51
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gagagaaata gggaagcagt gaaggtagat gtcatttctg tttttagtgg tggaatacaa      120

ggtgttcttg tgcttaaagg tcatgttctt gtgataaaac gcactgcaga gacaacatag      180

tttaattggc tgaggcaggt gactcccttt aagcatcagg gtggaacaaa ctacacgaca      240

aaatgtaatt ttaaaaacca ctctcattca aatgtaagaa tatcaaagca cccttaactc      300

attacatgag tgaaacaatg agtgtcatgg tctgaattgt gttcccctcc ccaaacccgt      360
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atgttcaagc cttaaaccct agt   383

<210> 52
<211> 3342
<212> DNA
<213> Homo sapiens

<400> 52
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gagagaaata gggagcagtg aaggtagatg tcatttctgt ttttagtggt ggaatacaag   120

gtgttcttgt gcttaaaggt catgttcttg tgataaaacg cactgcagag acaacatagt   180

ttaattggct gaggcagtac ctactgcacg accccccacg tccgcctcct gccattgcca   240

gcaggtgcct tgcgccggta cctggctgcg cttattcatc cattatggtc gctctgtcac   300

tggtgccatt atgtgctcac atgcccactc cctcaggttt agaagtcgcg ttgcccggca   360

acagaacaat ctgctggctt agcctttggc caagttggca gctggacgag gacgctcaga   420

gcccagctct tgagagttca agtatccgac agttccccac tgctcccagg agcggttacc   480

cgggcactct gtgcccctca ttcctgtttg ggccaaggcc gaggacctgc gagtaccaca   540

gtaagccagt gctgtgtgct ccgagttcca gggcatcccc cagctcagcc actacactga   600

gcacaaggac tctgtggggc ccaggagcag gtagtcaccc ctttggggtc cacaacaccc   660

ggctgtcccc agacttgtgt ccagggaaga tagtgttgag ggccctcaag gagagcgggg   720

cagggatgcc tgagcagcac aaggacccca gagtccaaga aaatcctgat gatcagagaa   780

cggtccccga ggtcaccggg gatgcacggt ctgcattttg cccctgcgg gacaatggag   840

gcccctctcc ctttgtgccc aggcccgggc ctctgcagac agacctccac gcccagagct   900

cagaaatcag atataaccac acatcccaga catcctggac gagctcgagc accaaacgaa   960

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ggccagcctc atcccgctgc cagctgaccc tcagttactc aaagacagtg agtgaggaca   1080

ggcctcaggc tgtctcttcg ggtcacacac ggtgtgaaaa gggggcagat acatcaccag   1140

ggcagacaat cgccccaacg ggtggctccc ccagatccca tgactctagg ccccgtagac   1200

gcaagattcc cctgctgcca cgcaggcgag gggagccttt gatgctgcca cctcccttag   1260

agctggggta ccgggtcacg gctgaagacc tgcacctgga aaaagagacg gcattccagc   1320

gcatcaacag tgcactgcac gttgaggaca aggccatccc ggactgcaga ccctcacggc   1380

cttcccacac tttgtcctca cttgcaacag gggcttcggg tgggcctccc gtttctaaag   1440

cacccactat ggatgcacag caggacagac ccaagtccca agactgcctg ggcctagtgg   1500

cccccctagc atctgctgca gaggtccccg ctacagctcc cgtgtctggg aagaagcaca   1560

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gaccaccagg acccctgttc tcctcctcag atccccttcc tgccaactct tcccactccc   1620

gggactcagc ccaggtcacc tcgatgattc ctgcccccctt cacagctgca agcagggatg   1680

ccggcatgag aagaacaagg tcggctcctg cagctgccgc agcagcccct ccccctcca    1740

cattgaaccc cacgtcgggg tcgctactca atgcagtgga tggaggcccc tcacatttct   1800

tggcctcagc cacagctgca gcacgtgccc agaggtcaga agtgagatat aaccagagat   1860

cccagacctc ccggaccaga tcctgcctca aacgaaatgc cagctccagc tcccacagct   1920

ctacggaagg cctccaggaa gtaaagcgga ggaggggcc agcctcatcc cactgccagc     1980

tggcccacag ttcctcaaac acagtgagtg aggacggacc tcaggctgtc tcttcgggtc   2040

accgctgtga aaacaaggca ggtacagcac caggcagac acttgccccc aggggtggct     2100

cccccagatc ccaggcctct aggccccaca tcaacactgc actgcacgtt gaggacaagg   2160

ccatctcgga ctgcagaccc tcacggcctt cccacacttt gtcctcactt gcaacagggg   2220

cttcgggtgg gcctcccgtt tctaaagcac ccactatgga tgcacagcag gacagaccca   2280

agtcccaaga ctccctgggc ctactggccc cctagcatc tgctgcagag gtccctcta     2340

cagctcccgt gtctgggaag aagcacagac caccaggacc cctgttctcc tcctcagatc   2400

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ccaccttcac agctgcaagc agggatgccg gcatgagaag aacaaggtcg gctcctgcag   2520

ctgccacagc agcccctccc ccctccacat tgaacaacac gtcggggtca ctactcaatg   2580

cagtggatgg aggcccctca catttcttgg cctcagccac agctgcagca cgtgcccaga   2640

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gaaatgccag ctccagctcc agctcccaca gctctacgga aggcctccag gaagtaaagc   2760

ggaggagggg gccagcctca tcccactgcc agctggccca cagttcctca aacacagtga   2820

gtgaggacgg acctcaggct gtctcttcgg gtcaccgctg tgaaaacaag gcaggtacag   2880

caccagggca gacactcgcc cccaggggtg gctcccccag atcccaggcc tctaggcccc   2940

acatcaacag tgcactgcac gttgaggaca aggccatctc ggactgcaga ccctcacggc   3000

cttcccacac tttgtcctca cttgcaacag gggcttcggg tgggcctccc gtttctaaag   3060

cacccactat ggatgcacag caggacagac ccaagtccca agactgcctg ggcctactgg   3120

cccccctagc atctgctgca gaggtcttct ctacagctcc cgtgtctggg aagaagcaca   3180

gaccaccagg acccctgttc tcctcctcag atcccccttcc tgccacctct tcccactccg   3240

gggactcagc ccaggacacc tcgctgattc ctgcccccctt cacacctgca agcagggatg   3300

ccggcatcag aagaatgttt cgtgttcgaa attgtttgag gg                       3342
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<213> Homo sapiens

<400> 53
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attcatttcc cataacaata ttattttctt aaatatgtta agctttaaaa taaaagcata   120

tcaaatgga   129

<210> 54
<211> 201
<212> DNA
<213> Homo sapiens

<400> 54
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tccgcccccca gctgccgtcg gcgtcagtcc acacacatag gcttttgggc ggtgctggaa   120

gcttctggcc cctgaacgtt cccccaggc cccgtttcca gggaaaggga taggcaggcg   180

cacgctgcgg ccgtttccac a   201

<210> 55
<211> 227
<212> DNA
<213> Homo sapiens

<400> 55
catgccgtgg cccatgccca tttgcacagg gacgcagggg gtctcacaca caggcagggt   60

ccgcccccag ctgccgtcgg cgtcagtcca cacacatagg cttttgggcg gtgctggaag   120

cttctggccc ctgaacgttc ccccaggcc ccgtttccag ggaaagggat aggcaggcgc   180

acgctgcggc cgtttccaca atccgacctc gtagctgggg cgtgccg   227

<210> 56
<211> 271
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (64)..(64)
<223> n=a, c, g or t

<400> 56
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tgtnctcaag gtaaacttct catgtgcttg tttcagttgt gagctcaatt agcctctttc   120

tcatgaaatg aatgcctttt tacttgaaag aatgactgag agccaggcta tggatattca   180

aacatgtatt tttcagacac ttcttgaaaa taagtgaagc aaacctgtta attacaaggg   240

aagcaatgac aatatttgtt gccaatgata a   271

<210> 57
<211> 573
<212> DNA
<213> Homo sapiens

<400> 57
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agagtgcatc tctcttggcc cacaaatgtg tttgcacact aaggtgatgg catccttaga   120

aggaagcaga gcagtgctct gaccttcgct tctggaaccg agaaaatgat gccatgctgc   180

tttgttggtg tgattgttgt tggttttttg tggatgaatt ttaaaatagt atttgtgact   240

atcatttcat gtgtccactc tttttaaaaa tgttaccttt tctaggattg gcagaatttg   300

gaattatatg tcttattaaa tatgctttga aagacagaag taataagttc tggttaatct   360

tttatagtgt ttgtcttggg agcaaatagt atgagagaga ggtgtgagaa tgggaataat   420

aatctaacat atcaaaatta gagaacccca aaccatcaca ttctttctct ttgtgccatt   480

ttagaattga gaataccgtc cttcttactg tggttatatt tttacttttg tatataaact   540

tgtagcagaa aataagattc agtagcttaa agg   573

<210> 58
<211> 843
<212> DNA
<213> Homo sapiens

<400> 58
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gagtgcatct ctcttggccc acaaatgtgt ttgcacacta aggtgatggc atccttagaa   120

ggaagcagag cagtgctctg accttcgctt ctggaaccga gaaaatgatg ccatgctgct   180

ttgttggtgt gattgttgtt ggttttttgt ggatgaattt aaaatagta tttgtgacta   240

tcatttcatg tgtccactct ttttaaaaat gttacctttt ctaggattgg cagaatttgg   300

aattatatgt cttattaaat atgctttgaa agacagaagt aataagttct ggttaatctt   360

ttatagtgtt tgtcttggga gcaaatagta tgagagagag gtgtgagaat gggaataata   420

atctaacata tcaaaattag agaaccccaa accatcacat tctttctctt tgtgccattt   480

tagaattgag aataccgtcc ttcttactgt ggttatattt ttacttttgt atataaactt   540

gtagcagaaa ataagattca gtagcttaaa ggggccaggc actgtggctc atgcccgtaa   600

tcccagtggt ttagaaggct gaggggaagg atcacttgag gcctggagtt tgaaatcaac   660

ctgggcaaca tagcaagact ctgttccttc aaaaaaaaat ttttaaaaat tagctgagca   720

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tggaggtgca tgcctataat cctagcaatg attataccat tacactccag cctggatgat      780

agagtgacac cctgtctcaa agagaaaaaa aaaaaaaaaa aattctgcgg cgcaagaatt      840

cgc                                                                    843
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<212>   DNA
<213>   Homo sapiens

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acgattccga atccaaacct cagagacagc ccccatccct ctcgttagcc acccacacac      120

cccgctcagc aacaataaca acctgcattt agggaacgtg tgttatgtgc caggccacac      180

aggcattatc tcatgtactc ctcacaggca ccttatcaag g                         221
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```
<210>   60
<211>   535
<212>   DNA
<213>   Homo sapiens

<400>   60
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gggtgtgccc tcgccgtcct cgccttcgtc ttgcacggga caagatgtca cgattccgaa      120

tccaaacctc agagacagcc cccatccctc tcgttagcca cccacacacc ccgctcagca      180

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gatggaaatg ttccctgtgt tgttcagtat ggtagtcact ggccacaagt gagcactgga      420

aatgtgccta ttgagactga ggaactgatt ttttcatttt gtttaattgt aattaaacag      480

ttacgtgtgg ctgtggtatt ggaaaaaaaa aaaacaaaaa aaaaaaaaaa aactc           535
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<210>   61
<211>   514
<212>   DNA
<213>   Homo sapiens

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catgtcattc ctttgcaaaa ctaagtttcc ctttgcactc aaaacaatat ctgaatgtct      120

tgctctggtt tctcaggccc cgcctctacc actggcctca gctcttcccc tctctccatt      180

gctcactgaa taacagccac caagacctcc ttgccattgc tcaaacatgc aaggcctaca      240
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cctgccacag ggccttggca catgctattc catctgttta caatgcttgt ctccacatgg   300

ctacttcttt gtagcagttg gtctcagctc aaatgtcatg tccccaacca gcctacctaa   360

agcagttctc cctacctagg cctttcttgc tcaccatgta aaagattcct atttagtttc   420

tgttattatc cttcttgctc tagaatggaa gccctacgag ggcaagatat ttttctgtat   480

cggtcactgc tatagcttca acaccaagaa catg   514

<210>   62
<211>   598
<212>   DNA
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<400>   62
tttcttctgg tcttattcct ctggatctaa atatatcaac attgacatgt gaggtcagaa   60

ttttatcatt tgaaaaattt ttttcacttt actgaaaatt cagtcacttc ttcctgaaga   120

aggaagcaat tgcatatcaa ttttcttcta ttccagctta atctatttat ttttctcttt   180

tacattaaaa cattctttta atgatatatg ctgcctgtaa atatttccca cccactttcc   240

agaggtaatc cactgttatc aagtaagttt agtaaatttt ttttaattga attttctcaa   300

taggtcatta acgtgtttca aagttgaaaa attacaaaac tatgtgtcgt gaaaagtctc   360

cttctttccc ttgtgtccca agctacctag ttcttggagc cagttgatgt tatcagattc   420

tttggtattc tttcagacac acatggtatg cattatttga gcaaggggc gtgggtgtgt   480

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cttaagtaac ttcatttcat tatatgtatt ccactttgta aaattagata ctacatgc   598

<210>   63
<211>   648
<212>   DNA
<213>   Homo sapiens

<400>   63
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agaattttat catttgaaaa attttttttca ctttactgaa aattcagtca cttcttcctg   120

aagaaggaag caattgcata tcaattttct tctattccag cttaatctat ttatttttct   180

cttttacatt aaaacattct tttaatgata tatgctgcct gtaaatattt cccacccact   240

ttccagaggt aatccactgt tatcaagtaa gtttagtaaa ttttttttaa ttgaattttc   300

tcaataggtc attaacgtgt ttcaaagttg aaaaattaca aaactatgtg tcgtgaaaag   360

tctccttctt tcccttgtgt cccaagctac ctagttcttg gagccagttg atgttatcag   420

attctttgt attctttcag acacacatgg tatgcatttt tgagcaaagg ggcgtgggtg   480

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tgtgtccctc tgtttttaag ttctaaatgt tagcatgcta cacatacttt tttcatatat    540

tttcttaagt aactttattt cattatttgt attcagtttt gtaaaattag atactacatg    600

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<210> 64
<211> 601
<212> DNA
<213> Homo sapiens

<400> 64
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tatcacaagt tgtccctcat gtggatccca tgacttgagt agtgggaaac tccaagctga    120

tttgaagatt ctttatttga gagtggacct gcacacctag tgttcctggg tcagtccagg    180

ggcgagcaga tcattgaagg actgcacctt tatcctaggc tcaccaaatc cccaggtgta    240

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gaggaaacta tacaatgacc tagcaaattt gaaaaaggaa ccaggaacaa cttgtagaca    480

tgaaaagttc atgtctttat aataaaaatc taacagatgg atttactagc agattacata    540

aaactgaaga gagtgaatga cctggaaagt agagaagaag aaatataatt tagagaacca    600

c                                                                    601
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<210> 65
<211> 1216
<212> DNA
<213> Homo sapiens

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<223> n=a, c, g or t

<220>
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<222> (1204)..(1204)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (1206)..(1206)
<223> n=a, c, g or t

<400> 65
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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      120

nnnnntaact ctaatacacc agtacaatgg aaagattcct aaattcaaaa gccagaaggc      180

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gctccactat ttacttacct ctgaaacgaa gggctgaccc agatcagttg ttctctgacc      300

tgcttggagg gactcagagg ctgtggagag tgaatatttc catcagctga tgcccttctc      360

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catttgaatc ctgtcagccc tgttttccat caccaaagga ctccggagga actgtgccaa      480

gcaggctgtc agccacgggc aagctttctg aaaaagacgt gccaactgca gccacagaaa      540

gtccattccc ttgaataact ctgctaatat ttgaaaatta gttcccttgc tcctgatcat      600

gctactgggt atttggatat aagagccaag gatgagggca atagaaaatt aaaatcatgt      660

tctactcata taaactgcac agatatggaa gggtaggtcc tattacctat aatcctggga      720

tttttagact ctcactttca ttggaccaga gttgccttag ggacagtaaa aacacaaaat      780

gctgggtatt gttttcatca agcaactact gatagtgcac atttaaatca aaattcttct      840

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caatttggct gtggaactgg catgaaagca cgtcactgtg tcagcacctg ggccaccaga     1020

tgaataacct atgaacaaca gctttggact aaaatatgaa ggggttgttt tccttcaatc     1080

tccccctacc ttcctcagaa cctgctacaa ggaaagattt atagactcga aagcgtcaat     1140

gactgattag acccatatga ttgctcctgc tgtttctgat attttaaaaa attgtcttat     1200

aaangnataa aaataa                                                     1216
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<210>  66
<211>  1430
<212>  DNA
<213>  Homo sapiens

<400>  66
gctcaccaat gtgggtgggc ctcattcaat ccattgcaga cttgaataga actaaaagga       60

agaggaaggg caaatttgtt ggctgcttga gctgggatat tcatctttct cctgatcttg      120

gacatcagaa ctcctgattc tcaagccttt gggtttggac tggaggcacc agctttcctg      180

ggcctccagc ttgcagatgg catatcatgg aacttctcag cctccaaatt cataactcta      240

atacaccagt acaatggaaa gattcctaaa ttcaaaagcc agaaggctgg gttcctgttc      300

ccaccctgcc ttttaccttc tgtgtgttcc tgatgaagac acttcatgct ccactattta      360

cttacctctg aaacgaaggg ctgacccaga tcagttgttc tctgacctgc ttggagggac      420
```

```
tcagaggctg tggagagtga atatttccat cagctgatgc ccttctcagg cctcaatctc      480

ccctggtttg cagactgtgg ccctccttgg cctctgtgga atctggccat ttgaatcctg      540

tcagccctgt tttccatcac caaaggactc cggaggaact gtgccaagca ggctgtcagc      600

cacgggcaag ctttctgaaa aagacgtgcc aactgcagcc acagaaagtc cattcccttg      660

aataactctg ctaatatttg aaaattagtt cccttgctcc tgatcatgct actgggtatt      720

tggatataag agccaaggat gagggcaata gaaaattaaa atcatgttct actcatataa      780

actgcacaga tatgaagggt taggtcctat tacctataat cctgggattt ttagactctc      840

actttcattg gaccagagtt gccttaggga cagtaaaaac acaaatgct gggtattgtt      900

ttcatcaagc aactactgat agtgcacatt taaatcaaaa ttcttctaat cccaaactca      960

gtaaacagat gctgtgagct tagttctgcc cctctggctt cagattttac cccactggat     1020

gtgcccaatt ctgagatgac aagacgcttc cagcttccac atggttgcaa tttggctgtg     1080

gaactggcat gaaagcacgt cactgtgtca gcacctgggc caccagatga ataacctatg     1140

aacaacagct ttggactaaa atatgaaggg gttgttttcc ttcaatctcc ccctaccttc     1200

ctcagaacct gctacaagga aagatttata gactcgaaag cgtcaatgac tgattagacc     1260

catatgattg ctcctgctgt ttctgatatt ttaaaaaatt gtctcataaa gagatacaaa     1320

taaataatca atggcaaact tctggcatgg gagagacatt tagggaaaga agtcatctca     1380

gcctcccca acacacacat gcacacacac atacagctgc aaacacaatt               1430
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<210>  67
<211>  430
<212>  DNA
<213>  Homo sapiens

<220>
<221>  misc_feature
<222>  (72)..(139)
<223>  n=a, c, g or t

<400>  67
gggatattca tctttctcct gatcttggac atcagaactc ctgattctca agcctttggg       60

tttggcctgg annnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      120

nnnnnnnnnn nnnnnnnnnt aactctaata caccagtaca atggacagat tcctaaattc      180

taaagccaga aggctgggtt cctgttccca ccctgccttt taccttctgt gtgttcctga      240

tgaagacact tcatgctcca ctatgtactt acctctgaaa cgaagggctg acccagatca      300

gttgttctct gacctgcttg gaggactca gaggctgtgg agactgtggc cctccttggc      360

ctctgtggaa tctggccttt gaatcctgtc agccctgttc tccatcacca aaggaatccg      420
```

```
gaggaactgt                                                             430


<210>  68
<211>  829
<212>  DNA
<213>  Homo sapiens

<220>
<221>  misc_feature
<222>  (240)..(354)
<223>  n=a, c, g or t


<400>  68
gtatgtacta cccacataag tgggacactt tgaacaatga aatatagatg ttttcaccaa    60

agaagggagt cttatttttt tccgacttca gacaattcat cttcatccat taatttttcc   120

tttttgtaat atgtaccttt atgctaattt ttaatatgca aataacttac aaatatatgc   180

tcagcatttg agtacaggct gtgctttatt acatattaca tgcatgtatg caatgtactn   240

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn    300

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnacaaaa    360

taaaatttgg aatgaagcag gaattatctt ggactattta taatttatta agatactaaa   420

taccgtcatt atgaaatggt ctcattaagt gatccctgtc taaagagttg cataatagtg   480

agacaataag gggcttagtg tatttttttt cttttgaaca taagctattg tacatttgtg   540

ccaacaggac ttctttatag agtctcattt tcctattaca atattatttt tgttattaag   600

tgaaacacct catatcacca ccactgctga gccagatata atagactgta ctgtgtaagg   660

ttcttaaaac tcacatctat aataaccaga cctctttttt tatattgatt caaattatgt   720

ttaatgctga attataagca aaacctacaa gaataaaatc attttatgct ttgaaactga   780

ctcctttttt aaaaaaagaa tgatcacaac taccaactcc ctcatctat                829


<210>  69
<211>  541
<212>  DNA
<213>  Homo sapiens

<400>  69
atagactagt aaagtctgtt tttatataaa agtgacacag gaagctgtta caatctagga    60

atgggcaggt atggtcagtg gttgtcacaa tagagccacc caaggagaca tctcttctcc   120

agatcctaac agagtgcatc ttgtgctttt cctaacagac ctgtcggact ggcttttttct   180

cttttaagga tatagagaaa gcaaaattag caaatctagt ttcttgtcac tttactagga   240

gggaggaaaa gagagaaaga atgcacttgg gaatgggagg ccttgctttt aatttaccag   300
```

```
atgccagtta gagcgttaat gccacacgag ccagagaggt caccttgctg agcatggctt     360

gactgttgca gcctctttct gcgactccag acatgcgatg tctgttagct gattctagcc     420

ttcagatgca gcccggagat gtaaccctga ggctggagtc ctgtggctct aatcccagac     480

agaggcaact ccaccaagtt ctggtttggg tcagaaatag agggaaagga tgaatgaaag     540

a                                                                     541
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```
<210>   70
<211>   696
<212>   DNA
<213>   Homo sapiens

<400>   70
atagactagt aaagtctgtt tttatataaa agtgacacag gaagctgtta caatctagga      60

atgggcaggt atggtcagtg gttgtcacaa tagagccacc caaggagaca tctcttctcc     120

agatcctaac agagtgcatc ttgtgctttt cctaacagac ctgtcggact ggcttttttct    180

cttttaagga tatagagaaa gcaaaattag caaatctagt ttcttgtcac tttactagga     240

gggaggaaaa gagagaaaga atgcacttgg gaatgggagg ccttgctttt aatttaccag     300

atgccagtta gagcgttaat gccacacgag ccagagaggt caccttgctg agcatggctt     360

gactgttgca gcctctttct gcgactccag acatgcgatg tctgttagct gattctagcc     420

ttcagatgca gcccggagat gtaaccctga ggctggagtc ctgtggctct aatcccagac     480

agaggcaact ccaccaagtt ctggtttggg tcagaaatag agggaaagga tgaatgaaag     540

aagatacaaa gaaataatga acaagtgagt tctttcagct gcttacttgg gtggtctgca     600

ggcagcaaga gacaggaagg aggctgttgt ggggtccttg ttcgaggcag tgggagattt     660

gctcagaggg gttgtgtggg aagtgagaga aggggt                               696
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<210>   71
<211>   1207
<212>   DNA
<213>   Homo sapiens

<220>
<221>   misc_feature
<222>   (957)..(957)
<223>   n=a, c, g or t

<400>   71
gcagtgccag gacctctccc ggaggcgggg cagagcagca gcttctcggc cctgtgccga      60

gcccaggcct gcacccctaa ggcaggcact gctccgtgat ccaggaacca cctctctcta     120

cagctgggag tgagcagtca gagagggaga cagccttgcc cggtgctacc cagcaagcta     180

gtcaccgagt gggcagaggg aggagcggcc ctcaccggat gtcaagcagc ctgggtcccc     240
```

```
agtccagctc tgcctgtccc tcgcaataac gcctcagtga cgaccatttg tgagccatct     300

ctctgtctca ggcacggtgc tacatgccaa cgaaacctgc tcccattgaa ccctggccag     360

ccagtgaaga aagggttggg cctgggaggt gccactttac agacaggggc accaaggggc     420

agggtggcag gaggcccacc ggacgttccc catgaagtag cagtcccagc atccacaccc     480

agcaggcacc acgctggccc gcagcctccc tgccagcacg cctggcttcc cggcctcgga     540

acttgatctg ctccctcttc cggacactgg ggctcctgcc aagtcctggg ctgggcagca     600

actgctgaac attctaagaa atccctccca gggttttctc aggagcccgg gtggggcagg     660

aagtccccag gggctgaggg gaccgtggcg gcaggtggca cccagagcag cactctcctg     720

gggcccaggc tgttgggcca gaggcaggac tgtgaggcct agtgtagggc ctcctgccag     780

tggccggcac ctacttgtgg ggctgggggt tcccccagca ggttgggctc cccacctgac     840

acactcacag accttgtgcc ttggagagcc agtgttcccg gggccacata gctatgccgc     900

ccaggggctg ggcctgtccc agctctggtc ccccggcccc aggtcctgga cgctggntcc     960

gcgcagcagc aggcggcctc cggaggacac gatgtgactg gctgccgcta cgtcgcactc    1020

agatgagtct gcgccggatc gacctgctgc cgagtcctgc cggacaggca caggcaggga    1080

gtgaaaatta tctacccctt tttatttctt aataactgaa tgaaaataaa cattggtggt    1140

ttgacaaata actacatatt ttcaaaccca gccagtccag gggatgcagt ttccaggtgc    1200

gttatgc                                                             1207
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<210>   72
<211>   263
<212>   DNA
<213>   Homo sapiens

<220>
<221>   misc_feature
<222>   (231)..(231)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
<222>   (239)..(239)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
<222>   (242)..(242)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
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<222> (248)..(248)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (259)..(259)
<223> n=a, c, g or t

<400> 72
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cattttactt tacctgtcta cagtgttttg cgcaattgac cactccttcc tttttgaagt   120

attttctttc cttggtttct gaaatactgt tatcttccta tctcactggc catacattct   180

agtctccttt gctagtttat tatggttttc atcttctcaa caacaatttt ntttttttng   240

gnggagangg agtcttgcna tgt   263

<210> 73
<211> 579
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (547)..(547)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (555)..(555)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (558)..(558)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (564)..(564)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (575)..(575)
<223> n=a, c, g or t

<400> 73
tggtgtttga gtcctaaaaa ttgtatacca gtgctaattg ggatatacca aactttttgt   60

ctcttagtaa ttagttttgt tttgttttgt tttgtttaa tgttgtgctt atcttaaggt   120

```
gtaaatgcag acaaagttgg aattgaagct gccgaaatgc tattagcaaa tcttagacat    180

ggtggtactg tggatgagta tctgcaagac caggtaatga cacatttagg ttaaaaaccc    240

tctaacctgt tagatttgaa tatgtggtag attgaatatc aatttaaata attgactttc    300

agacactaat tagcaagtcc tacttcaata atttaaaaaa atattctggg atttgcattc    360

ctcaaatttc agccctcatt ttactttacc tgtctacagt gttttgcgca attgaccact    420

ccttcctttt tgaagtattt tctttccttg gtttctgaaa tactgttatc ttcctatctc    480

actggccata cattctagtc tcctttgcta gtttattatg gttttcatct tctcaacaac    540

aattttnttt ttttnggngg aganggagtc ttgcnatgt                           579
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<210>   74
<211>   339
<212>   DNA
<213>   Homo sapiens

<400>   74
ctctgttcct tgctcatctt catggtgatt gggggtagat cagatgagtg tgtaaaagcc     60

ccttgaaagc tggaaagagc ttaacaaata tcagctgttg ccatgaaaga atatttgctt    120

actttccatt gtgtataaga taacgataat catagaatta atattattca acttccttgt    180

gtcttttgca catttctgta cagtcctgtt tttgtttgtt actgtcattc tcaaagtact    240

caagttgaat tttgtcactt tggatttctt ccaggaatat gtgagagaca tttaggtctc    300

taatgatgaa gtattttcta ggcgtaatgc aaaagattg                           339
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<210>   75
<211>   299
<212>   DNA
<213>   Homo sapiens

<400>   75
caacgacaga taacttcgtg atggaaaatg taggtctcct tagtagttag ccctctgcca     60

ggtgacttcg tttccacctc cccttatata ttgttcttcc ttcctctcta aattctctaa    120

atctctgctt atacagagca atctggctct ctctggcctc tccagtcatc atacatcata    180

ctcacattca ccatcttgag aagtgcagta agccacataa atgcagcaga agtaccttat    240

gcagtcctag gaggctgtgg ttttgagttg cttttttttt tcttttggga gacggagcc    299
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<210>   76
<211>   247
<212>   DNA
<213>   Homo sapiens

<220>
<221>   misc_feature
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<222> (174)..(174)
<223> n=a, c, g or t

<400> 76
tgtatattga gctcctactg tgtggcaagg cctatggtaa gcattttatt ttggtaactt   60

gtttaatcct cattacaatt ctgtggtaaa tgctattatc tgtttttata ttgaagggat   120

gaaatggagg ctcagaggga tatgtagtag ctaaatgtta gagctaggat tganacccaa   180

attgacttct gagtatagat ttccccccaa ctgtatgata cttcatattt ggagtcagct   240

tgaagta   247

<210> 77
<211> 254
<212> DNA
<213> Homo sapiens

<400> 77
tgtatatttg agctcctact gtgtggcaag gcctatggta agcattttat tttggtaact   60

tgtttaatcc tcattacaat tctgtggtaa atgctattat ctgtttttat attgaaggga   120

tgaaatggag gctcagaggg atatgtagta gctaaatgtt agagctagga ttgaaaccca   180

aattgacttc tgagtataga tttcccccca actgtatgat acttcatatt tggagtcagc   240

ttgaagtaat tcac   254

<210> 78
<211> 504
<212> DNA
<213> Homo sapiens

<400> 78
tgatttgatt tggtttttaaa atagaatagt tgtactctga gggaggaggg aaatgcttaa   60

acaatactaa gaattccatt ctttagagac aaattactta gaagttgata gtgacatatt   120

gaaagggttg ttgattgttg gattattcag gtgatgaaga tgatggtagg ggccatggcg   180

gctgagggag aatgagtctt aaacactgag gaggcacaaa agattgggtg gctggatata   240

ataggaaact ggaacgaaag aaggagaaga gaatggcgat actgataaaa aatagaatga   300

aagaagatgt gtggaaaaga aagtttcact ttgaaggctt gatttttgaa gtgatggcag   360

atatagatat acatccaata gatgagtggg aaaagtaaat caaacagaaa tgaaaaattg   420

agtccaagat tgatgggaga ctaataatgg ggaggactga gcctgggggc aactacatta   480

gtaacagtgg caggttttgt tttt   504

<210> 79
<211> 210
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (80)..(99)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (173)..(173)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (175)..(175)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (206)..(206)
<223> n=a, c, g or t

<400> 79
gtccctctag agaaccctga ctaatacagg tggttcctgg ctcatggcag tgtgactcca   60

gtctttacat ggcgttcccn nnnnnnnnnn nnnnnnnnnc aaatttcctc ttttcataag   120

gaccgtggta ttggataggg gtccaccecta cttcgatatg accttatttt aantncatct 180

ttgatgaccc tgtttccacg taaggncaca   210

<210> 80
<211> 161
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (116)..(116)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (148)..(148)
<223> n=a, c, g or t

<400> 80
gagggtcaga agcagaaaga tgacatcata agaaagactc aactggccat ttttggcttt   60

gaaggtggaa aggggacctg agtccaggca tgtgggcagc ctggagaagg cgaganaatg   120

gattcttccc cagaatccct ggaaaggnac gtggccctaa c   161

<210> 81
<211> 112
<212> DNA
<213> Homo sapiens

<400> 81
tagcaccttt taataactct ttttagagta atttagagca aactagataa attttaatat   60

atatctcatt gcatactttt atgtaacttt gtcttagaaa aacaagagtt ct   112

<210> 82
<211> 277
<212> DNA
<213> Homo sapiens

<400> 82
tgaaatgatg acaccagtag aatatggtga gatatgtata cacaatgtaa tacctagagt   60

gacaatttaa aaacctatac aaagagtgac acataaataa acaaaaacaa cataaaaata   120

aaaatataat tctaaaaata ttcaagtagc caattggaag gtggaaaaaa gaaaaagaac   180

aaaaaataga acagcactaa acaaaaaata aaatcgcaga cctaggccct gacatatcaa   240

taattatatt aacatgtaaa tggtctaaat tttacca   277

<210> 83
<211> 637
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)..(7)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (92)..(196)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (232)..(316)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (367)..(427)
<223> n=a, c, g or t

<400> 83
gtccttnggt gttgcaccaa acaggctaag aagcaatgac attgattatg aggaacttgg   60

aactcagatg tattaatttc ctattgtgtc tnnnnnnnnn nnnnnnnnnn nnnnnnnnnn   120

```
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      180

nnnnnnnnnn nnnnnncact ttctttctgt aggctctagg agagaatcta gnnnnnnnnn      240

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      300

nnnnnnnnnn nnnnnccaa gtccttctca cactgctgtc tttttggttc tctctcttgc      360

ctgcctnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      420

nnnnnnncat agttgattag cagccttaat ccatctgtaa ttttaattcc cttttgccag      480

gtaatgtggc cattatcttg cctacaacct cagaggatgt tgataatgta aagggtagtg      540

aattggggag ttcatagggt ttgatagttg acaaatacag agtgtagtat taggtagggg      600

ttttttggca gggtgcagtg gcccatacct gtaatgt                             637
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<210>   84
<211>   577
<212>   DNA
<213>   Homo sapiens

<400>   84
caggcataag ccaccacacc tagccaagaa accattcttt gaacacaagc aaatatactt       60

tggagaaaaa tttaataatc ctggcagggc tacattcaac ataattctgt tatgggggaa      120

ggcagcatgc tttggctgct cagtgagcta tgttctgtac aaccaagtga aattgctaaa      180

aaaagattct cctgtataca gtaacttaaa gtgatgcagt ctacttaaga tcagatctga      240

gttacaaaat caaaagtgac agctcctatg ttctttaaa gtccaatctc ttttttttcat      300

tgttgtgctc caaatgcctt gagtacctga tgtagagtag gtggctaata aatattggtt      360

gaatttcttg aacgaatctg ttatgaaaag atctactttg ctcatctctg tgccccaata      420

gcaggagctt gaggagaagg agaaaatatt gggtcagagc ttttgattaa tatgtatgat      480

tctattaaac gggttcacta aaccaaaaaa ggcaaggaaa acagttaaac caagagtctt      540

gaggttcaag tcttgtgatg attaaatcat catccta                             577
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<210>   85
<211>   687
<212>   DNA
<213>   Homo sapiens

<400>   85
ttcccatgtt agccagggct ggtcttgcac tctgaacctc agggtatcac ccccccttgg       60

gctcagggct catggctgat attacaggca taagccacca cacctagcca agaaaccatt      120

ctttgaacac aagcaaatat actttggaga aaaatttaat aatcctggca gggctacatt      180

caacataatt ctgttatggg ggaaggcagc atgctttggc tgctcagtga gctatgttct      240
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```
gtacaaccaa gtgaaattgc taaaaaaaga ttctcctgta tacagtaact taaagtgatg    300

cagtctactt aagatcagat ctgagttaca aaatcaaaag tgacagctcc tatgttcttt    360

taaagtccaa tctctttttt tcattgttgt gctccaaatg ccttgagtac ctgatgtaga    420

gtaggtggct aataaatatt ggttgaattt cttgaacgaa tctgttatga aaagatctac    480

tttgctcatc tctgtgcccc aatagcagga gcttgaggag aaggagaaaa tattgggtca    540

gagcttttga ttaatatgta tgattctatt aaacgggttc actaaaccaa aaaaggcaaa    600

ggaaaacagt taaaccaaga gttcttgagg ttaaagtctt gtgatgatta aaatcatcat    660

cctaagatga tgatgacata aactttc                                       687
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<210>   86
<211>   77
<212>   DNA
<213>   Homo sapiens

<400>   86
tgtcgtttta caactgtcgt gactggtgaa aaccctgtgc gttaccctaa cttaatctgc     60

cttgcatgca catcccc                                                    77
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<210>   87
<211>   575
<212>   DNA
<213>   Homo sapiens

<400>   87
cacacacgtg cacacacaat actcacttaa caaacattta atttattgaa catttattat     60

atgccaaagc tggtataaga caccaaaaga gtaagacaga aagtattctt ccctggagct    120

ttgtctgact ttccaagctt tattaggcat caaacaaaac tgaagtgctt tttaagattc    180

aagtctccta cgtcgtctaa ggcagagtaa gtagccttca gtactatatt ttactctaat    240

tttttttttaa cacaatggca gtactataag tatgaaactt tggtataaat gtcagattct    300

agattgtgct cctgctttct gcacactcta atatttttaa acatctcgaa aatacagagt    360

ggcagcaaaa ttacctgtaa aaacatacta gctcaagagt ttgacaggct caaaataaat    420

taccttaaat acattaaaca agaagtgtat ttgttataca gtatgtactg accaaaatta    480

aagtgcaggt tgtacagaaa gagctgcttg tgttatttta tgagcaaaat gaaaagctaa    540

tttggtacat ttaaaaatca gcatctagca aattc                               575
```

```
<210>   88
<211>   663
<212>   DNA
<213>   Homo sapiens

<400>   88
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cagtaattcg gcacgaggcg cacttttttt tttttttttt tataaaaaca gtcaacactt      60

gccccaccct actcccagca tatgcacaca cacacgtgca cacacaatac tcacttaaca     120

aacatttaat ttattgaaca tttattatat gccaaagctg gtataagaca ccaaaagagt     180

aagacagaaa gtattcttcc ctggagcttt gtctgacttt ccaagcttta ttaggcatca     240

aacaaaactg aagtgctttt taagattcaa gtctcctacg tcgtctaagg cagagtaagt     300

agccttcagt actatatttt actctaattt tttttttaaca caatggcagt actataagta   360

tgaaactttg gtataaatgt cagattctag attgtgctcc tgctttctgc acactctaat     420

attttttaaac atctcgaaaa tacagagtgg cagcaaaatt acctgtaaaa acatactagc    480

tcaagagttt gacaggctca aaataaatta ccttaaatac attaaacaag aagtgtattt     540

gttatacagt atgtactgac caaaattaaa gtgcaggttg tacagaaaga gctgcttgtg     600

ttattttatg agcaaaatga aaagctaatt tggtacattt aaaaatcagc atctagcaaa     660

ttc                                                                   663



<210>   89
<211>   80
<212>   DNA
<213>   Homo sapiens

<400>   89
gattggatgg tgtttcagaa aacaagcctc tattcaaata atattttact ataattcttg      60

ttaaaaatac tgtatactaa                                                  80



<210>   90
<211>   496
<212>   DNA
<213>   Homo sapiens

<400>   90
gccgactttt tttttttttt ttttgtatt tttagtagag acggggtttc aacatgttgg       60

ccaggatggt cgtgatctcc tgacctcgtg atccgctgcc ttggtctccc aaagtgctgg     120

aattacaagc gtgacgcact gtgcccagct tagtatacag tatttttaac aagaattata    180

gtaaaatatt atttgaatag aggcttgttt tctgaaacac catccaatct gaaagtagaa     240

gaaaaaggct gggtgtggtg gctcatgcct gtaaccccag cactttggga agctgaggcg    300

ggcggatccc ttgagctcag tttgagacca ggctgggcaa ctccatcttt accaaaaaat    360

acaaaaatga gccaggcatg gtggtgtaca cctgtggtcc cagcggctct gggggctgag    420

gtgggaggaa ggcttgggcc taggaggtgg aggttgcagt gagccaggat tgtgccactg    480

ccgatagagc cagata                                                     496
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<210> 91
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (263)..(263)
<223> n=a, c, g or t


<220>
<221> misc_feature
<222> (327)..(327)
<223> n=a, c, g or t


<400> 91
gaaatgggtc cggacaggtt aaaacaaaaa tccaatactg ccgtagtttc taggtggata      60

taacattttt agaaatctta taatacaata ttaacttcat tggctgaacc caagcctttc     120

agcctttata gatttgccat gatcctaata catataagca ttcattgtat tcattattaa     180

ttacttcata gattcagtgt gtgacgaagg gagatgattt ttaacaaata ataaagtgaa     240

atgatctagt tttgctatgt tgnttgagca acatcaaata gttttgctaa aatagataat     300

ttatagtgat ttttttttca ctatggnatt ttcttaaata tattaagggc tttcattttc     360

tgataccacc tagtttaatt ggggg                                          385


<210> 92
<211> 500
<212> DNA
<213> Homo sapiens

<400> 92
gaaatgggtc cggacaggtt aaaacaaaaa tccaatactg ccgtagtttc taggtggata      60

taacattttt agaaatctta taatacaata ttaacttcat tggctgaacc caagcctttc     120

agcctttata gatttgccat gatcctaata catataagca ttcattgtat tcattattaa     180

ttacttcata gattcagtgt gtgacgaagg gagatgattt ttaacaaata ataaagtgaa     240

atgatctagt tttgctatgt tgtttgagca acatcaaata gttttgctta aaatagataa     300

tttatagtga ttttttttc actatggtat tttcttaaat atattaagtg cttttcattt     360

tctgatacca cctagtttaa ttgggggtga atatcagaga aattagaatg ttatttcagc     420

tgaaggagta cagttttttt tttctcttct tagagaatat agtgcctcag atacagtcca     480

caacaaaaat tttggtttag                                                 500


<210> 93
<211> 364
<212> DNA
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<213>   Homo sapiens

<220>
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<222>   (19)..(19)
<223>   n=a, c, g or t


<220>
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<223>   n=a, c, g or t


<220>
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<222>   (35)..(35)
<223>   n=a, c, g or t


<220>
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<222>   (40)..(40)
<223>   n=a, c, g or t


<220>
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<223>   n=a, c, g or t


<220>
<221>   misc_feature
<222>   (70)..(70)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
<222>   (92)..(93)
<223>   n=a, c, g or t


<220>
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<222>   (95)..(95)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
<222>   (97)..(97)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
<222>   (121)..(122)
<223>   n=a, c, g or t
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<220>
<221> misc_feature
<222> (131)..(131)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (148)..(148)
<223> n=a, c, g or t

<400> 93
ttaggtccaa actcaggtna ncaaaactag tcccntcagn ccaattgctt gtacatttcn   60

acaggcaccn ctttggcaaa cccacatgga tnntnanaaa tggagaatga ggagacagcc   120

nnatattaat nagatgtatc aaactgtnac aatatgtgaa gagtattgtg tatatacaaa   180

caggaaacaa ttgaaagcct tcaacatgtg tgggtggggg gagagataac tgaattaaca   240

ggccatgtag taaaacttaa aatcaaatcc agtagtcttg aaggtatagt aattgtttag   300

ttttgaaggt atagtaatta agtactgcgc actaaaaaaa actgaccaaa aggccgggtg   360

cggt   364

<210> 94
<211> 1646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)..(19)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (21)..(21)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (35)..(35)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (40)..(40)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (60)..(60)

<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (70)..(70)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (92)..(93)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (95)..(95)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (97)..(97)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (121)..(122)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (131)..(131)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (148)..(148)
<223> n=a, c, g or t

<400> 94
ttaggtccaa actcaggtna ncaaaactag tcccntcagn ccaattgctt gtacatttcn   60

acaggcaccn ctttggcaaa cccacatgga tnntnanaaa tggagaatga ggagacagcc   120

nnatattaat nagatgtatc aaactgtnac aatatgtgaa gagtattgtg tatatacaaa   180

caggaaacaa ttgaaagcct tcaacatgtg tgggtggggg gagagataac tgaattaaca   240

ggccatgtag taaaacttaa aatcaaatcc agtagtcttg aaggtatagt aattgtttag   300

ttttgaaggt atagtaatta agtactgcgc actaaaaaaa actgaccaaa aggccgggtg   360

cggtggctca cgcctgtaat cccagcactt tgggaggccg aggcgggcgg atcacctgag   420

gtcaggagtt cgagaccagc ctggccaaca tggtgaaacc ccgtctctac taaaaacaca   480

```
aaaattagcc gggcatggtg gctcacgcct gtaatcccag cactctggga ggccaagaac   540

atgctgatgg tttatgccac aagttgacaa ctgtgtgtcc aactgtgaaa cctcagactc   600

aaggtctagc aaaagatgct tgggaaatcc ctcgagaatc tttgcgacta gaggttaaac   660

taggacaagg atgtttcggc gaagtgtgga tgggaacatg gaatggaacc acgaaagtag   720

caatcaaaac actaaaacca ggtacaatga tgccagaagc tttccttcaa gaagctcaga   780

taatgaaaaa attaagacat gataaacttg ttccactata tgctgttgtt tctgaagaac   840

caatttacat tgtcactgaa tttatgtcaa aaggtgctta ttccctttct attcgtgatt   900

gggatgagat aaggggtgac aatgtgaaac actacaaaat taggaaactt gacaatggtg   960

gatactatat cacaaccaga gcacaatttg atactctgca gaaattggtg aaacactaca  1020

cagaacatgc tgatggttta tgccacaagt tgacaactgt gtgtccaact gtgaaacctc  1080

agactcaagg tctagcaaaa gatgcttggg aaatccctcg agaatctttg cgactagagg  1140

ttaaactagg acaaggatgt ttcggcgaag tgtggatggg aacatggaat ggaaccacga  1200

aagtagcaat caaaacacta aaaccaggta caatgatgcc agaagctttc cttcaagaag  1260

ctcagataat gaaaaaatta agacatgata aacttgttcc actatatgct gttgtttctg  1320

aagaaccaat ttacattgtc actgaattta tgtcaaaaga gctccacaga cgctgcacag  1380

ctgtgaactc aactccagcc ctcagggaag gcagctcgca aagacctagg gcagcccgcc  1440

gatttcccaa aaagagcact gagaacccag caagcgtttt tctatatgat gctggcggca  1500

gcccagtgag ggaagtgcaa caagtatggt tctcctgctt gtcaactgtg aaacagcga  1560

ccctgaaagt ggaggagcca cagctggaat cgtgttcgtc tgaatacacg cacctttcct  1620

atgagccttg taaagccagt cgttga                                       1646
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<210>   95
<211>   415
<212>   DNA
<213>   Homo sapiens

<220>
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<222>   (109)..(173)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
<222>   (313)..(313)
<223>   n=a, c, g or t


<220>
<221>   misc_feature
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<222> (315)..(315)
<223> n=a, c, g or t

<400> 95
gagagtgttt tagcccagaa tagtggaacc ctcaggcaaa gtttataaaa attaatacca   60

ctgcagaaag tgattaaata ccatggactg taggtttagg tttctgctnn nnnnnnnnnn   120

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnngtgcata   180

atggagattt taatagtagc catctcataa ggtggttgca aaggttaaat gtgttaatat   240

gcatgatgca catagaacaa tgcctagcac atagtagaga tacataatca ctactatata   300

ctggtaccag tananggtca ggtcttatgg acctaaggtc atataactta gtctcttcca   360

agattcttga aatgatttct caaaacaaga gaatataaag aagaaacgtt atgaa   415

<210> 96
<211> 504
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (212)..(231)
<223> n=a, c, g or t

<400> 96
atatcctaat atgagcatgc ccattattcc tctgtcctat gaaacaaaaa tggcattttt   60

caatggattt gttttggata tataattagt tcatttgctg tttagaagcc ttgccaaaag   120

tgtttagatt ttggtactgc aactgctttc ctcttgccca gaaatgtttt gcctcttctt   180

ttcctacaag ttaaatgttc taaatataaa gnnnnnnnnn nnnnnnnnnn naattctaat   240

gtgaaaggca ctagctgtct aataggtttc atgtatcatt actattacta tatgtatctt   300

aatgtagtct atgtaggttt ttatcagaaa gtgtaccttt ctatggttta ttattttata   360

ttctggggcc ttttatctca gatataaacc atgaacagta atgatagtcc ctgacatata   420

aatcttagta aaaagtgatt aaaaatctaa aactcagtat gaaaaacata tcttgttagc   480

ataaattaaa acctttatt gttt   504

<210> 97
<211> 516
<212> DNA
<213> Homo sapiens

<400> 97
atatcctaat atgagcatgc ccattattcc tctgtcctat gaaacaaaaa tggcattttt   60

caatggattt gttttggata tataattagt tcatttgctg tttagaagcc ttgccaaaag   120

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tgtttagatt ttggtactgc aactgctttc ctcttgccca gaaatgtttt gcctcttctt    180

ttcctacaag ttaaatgttc taaatataaa ggggtatgtg tgtgtgtgtg taattctaat    240

gtgaaaggca ctagctgtct aataggtttc atgtatcatt actattacta tatgtatctt    300

aatgtagtct atgtaggttt ttatcagaaa gtgtaccttt ctatggttta ttattttata    360

ttctggggcc ttttatctca gatataaacc atgaacagta atgatagtcc ctgacatata    420

aatcttagta aaaagtgatt aaaaatctaa aactcagtat gaaaaacata tcttgttagc    480

ataaattaaa acctttatt gtttaaaaaa aaaaaa                               516


<210>   98
<211>   400
<212>   DNA
<213>   Homo sapiens

<400>   98
aattagatct ttcctgcaat aaggatctag gtggaggttt tgaagactcg ccggctcagt     60

tggtcatgct aaagcatcta caagtcctag atcttcacca gtgctcacta acagcagatg    120

acgtgatgtc actgacccag gtcattcctt tactttcaaa tcttcaagaa ttggatttat    180

cagccaacaa aaagatgggc agttcttctg aaaacttact cagcaggctc cgatttttac    240

cagcattgaa gtcattagtt atcaacaact gtgctttgga gagtgagact tttacagctc    300

ttgctgaagc ctctgttcac ctctctgctc tggaagtatt caacctttct tgggaacaag    360

tgtgttggtg ggcaacttga agctgcttct gggaaacact                          400


<210>   99
<211>   2352
<212>   DNA
<213>   Homo sapiens

<400>   99
attttgattg aacacaggct tgacagaatc ttcttttctt cttagaaatc ctagaaaaca     60

gaaagcaaca ggaagatgtc ttattgggaa ctacccccat caacttcacc atgagtcaaa    120

caaggaagaa aacttcctca gaaggagaaa ctaagcccca gacttcaact gtcaacaaat    180

ttctcagggg ctccaatgct gaaagcagaa aagaggacaa tgaccttaaa acaagtgatt    240

cccaacccag cgactggata cagaagacag ccacctcaga gactgctaag cctctcagtt    300

cagaaatgga atggagatcc agtatggaga aaaatgagca tttcctgcag aagctgggca    360

aaaaggctgt caacaagtgt ctagatttga ataactgtgg attaacaaca gcggacatga    420

aagaaatggg agaagcattt gagatgattc ctgaacttga agagctaaat ttgtcttgga    480

acagtaaagt gggaggaaat ttgcctctga tccttcagaa gttccaaaaa gggagcaaga    540

tacaaatgat tgagcttgtg gcttgctccc tcacgtcaga agatgggaca tttctgggtc    600
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aactgctacc tatgctgcaa agtctcgaag tacttgatct ttccattaac agagacattg    660

ttggcagtct gaacagtatt gctcagggat taaaaagcac ctcaaatctg aaagtactga    720

agttacattc atgtggatta tcacaaaaga gtgtcaaaat attggatgct gctttttaggt    780

atttgggtga gctgaggaaa ttagatcttt cctgcaataa ggatctaggt ggaggttttg    840

aagactcgcc ggctcagttg gtcatgctaa agcatctaca agtcctagat cttcaccagt    900

gctcactaac agcagatgac gtgatgtcac tgacccaggt cattcctta ctttcaaatc    960

ttcaagaatt ggatttatca gccaacaaaa agatgggcag ttcttctgaa aacttactca    1020

gcaggctccg attttttacca gcattgaagt cattagttat caacaactgt gctttggaga    1080

gtgagacttt tacagctctt gctgaagcct ctgttcacct ctctgctctg gaagtattca    1140

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ctctcctggc atcggtcata cagacgggtc atctggccaa actgcaaaag ctggacctga    1320

gctacaatga cagcatctgt gatgcggggt ggaccatgtt ctgccaaaac gtgcggttcc    1380

tcaaagagct aatcgagctg gatattagcc ttcgaccatc aaattttcga gattgtggac    1440

aatggtttag acacttgtta tatgctgtga ccaagcttcc tcagatcact gagataggaa    1500

tgaaaagatg gattctccca gcttcacagg aggaagaact agaatgcttt gaccaagata    1560

aaaaaagaag cattcacttt gaccatggtg ggtttcagta aactgatttc ccatgtccta    1620

ctaagctaca aaccattctc caaaggaaaa gaacatgaac gaattccaga gtcatgaact    1680

gaatttcaac ttctgggcca tttaatggga cttatattac aagagctttg taaatatata    1740

tatatattac atatatatat gtaatataca tatatacaca tatatataat atacatatat    1800

aatacacata tatatgtaaa tatatatata atatctaata tgagcatgcc attattctct    1860

gtctatgaaa caaaaatggc atttttcaat ggatttgttt tggatatata attagttcat    1920

ttgctgttta gaagccttgc caaaagtgtt tagattttgg tactgcaact gctttcctct    1980

tgcccagaaa tgttttgcct cttctttcc tacaagttaa atgttctaaa tataaagggg    2040

tatgtgtgtg tgtgtgtaat tctaatgtga aaggcactag ctgtctaata gtttcatgta    2100

tcattactat tactatatgt atcttaatgt agtctatgta ggtttttatc agaaagtgta    2160

cctttctatg gtttattatt ttatattctg gtgccttta tctcagatat aaaccatgaa    2220

cagtaatgat agtcactgac atataaatct tagtaaaaag tgattaaaaa tctaaaactc    2280

agtatgaaaa acatatcttg ttagaataaa ttaaaacctt ttattgttta aaaaattgtt    2340

aaaaaaaaaa aa                                                        2352
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<210> 100
<211> 565
<212> DNA
<213> Homo sapiens

<400> 100

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attttgattg aacacaggct tgacagaatc ttcttttctt cttagaaatc ctagaaaaca       60

gaaagcaaca ggaagatgtc ttattgggaa ctaccccat caacttcacc atgagtcaaa      120

caaggaagaa aacttcctca gaaggagaaa ctaagcccca gacttcaact gtcaacaaat      180

ttctcagggg ctccaatgct gaaagcagaa aagaggacaa tgaccttaaa acaagtgatt      240

cccaacccag cgactggata cagaagacag ccacctcaga gactgctaag cctctcagtt      300

cagaaatgga atggagatcc agtatggaga aaaatgagca tttcctgcag aagctgggca      360

aaaaggctgt caacaagtgt ctagatttga ataactgtgg attaacaaca gcggacatga      420

aagaaatggt tgccttgctg cctttctcc cagacttgga agaactggat atctcctgga      480

atggtttgta ggtggaaccc tcctttccat cactcagcaa atgcatctgg tcagcaagtt      540

aaaaatcttg aggctgggta gctgc                                            565
```

<210> 101
<211> 13
<212> PRT
<213> Homo sapiens

<400> 101

```
Met Leu Leu His Asp Ile Asp Trp His Leu Met Ser Ile
1               5                   10
```

<210> 102
<211> 14
<212> PRT
<213> Homo sapiens

<400> 102

```
Met Val Leu Pro Gly Ser Leu Ser Met Leu Thr Tyr Gly Met
1               5                   10
```

<210> 103
<211> 23
<212> PRT
<213> Homo sapiens

<400> 103

```
Met Gln Val Leu Tyr Trp Thr Tyr Leu Leu Leu Ile Leu Phe Pro Thr
1               5                   10                  15
```

Phe Thr Cys Leu Phe Ile Phe
            20

<210> 104
<211> 26
<212> PRT
<213> Homo sapiens

<400> 104

Met Asn Leu Tyr Met Asn Leu Pro Ser Ala Val Arg Phe Ser Arg Ala
1   5   10   15

Thr Pro Leu Ile Ser Leu Phe Leu Ala Leu
            20   25

<210> 105
<211> 49
<212> PRT
<213> Homo sapiens

<400> 105

Met Thr Thr Lys Lys Gln Glu Glu Cys Glu Ser Leu Lys Asp Lys Gln
1   5   10   15

Lys Ala Thr Lys Gln Ser Ile Ser Phe Cys Ile Tyr Ile Ile Lys Val
            20   25   30

Lys Phe Ser Thr Leu Ala Thr Asp Tyr Lys Ser Val Pro Ser Gly Cys
        35   40   45

Cys

<210> 106
<211> 61
<212> PRT
<213> Homo sapiens

<400> 106

Met Pro Ser Pro Ser Ala Pro Ser Ile Val Pro Val Leu His Gly Cys
1   5   10   15

Trp Val His Ile Cys Gln Ala Asp Val Tyr His Thr Leu Leu Lys Gly
            20   25   30

Phe Lys Ser Val Phe Glu Thr Glu Ser His Val Val Ser Pro Arg Leu
        35   40   45

Glu Cys Asn Gln Ser Lys Thr Pro Leu Lys Lys Asn Lys
    50   55   60

<210> 107
<211> 34
<212> PRT
<213> Homo sapiens

<400> 107

Met Glu Leu Val Met Glu Trp Lys Leu Thr Ile Cys Ser Pro Lys Cys
1   5   10   15

Ala Thr Thr Thr Gln Gly Leu Gln Thr Asp Ser Tyr Leu Asp Val Val
            20   25   30

Glu Ser

<210> 108
<211> 77
<212> PRT
<213> Homo sapiens

<400> 108

Met Val Asn Pro Ala Gln Glu Met Thr Leu Ser Arg Asn Thr Cys Lys
1   5   10   15

Tyr Lys Lys Gln Asp Ile Leu Pro Gln Leu Arg Ser Asp Lys Ile Thr
            20   25   30

Leu Gly Lys Leu Gln Gly Gln Cys Ala Ser Lys Thr Lys Ser Leu Val
        35   40   45

Ser Ser Leu Thr Ser Tyr Leu Pro Ala Phe Ile Ile Ile Ser Leu Ser
    50   55   60

Val Thr Gln Tyr Leu Val Asn Phe Leu Phe Trp His Thr
65   70   75

<210> 109
<211> 59
<212> PRT
<213> Homo sapiens

<400> 109

Met Gln Cys Lys His Phe Phe Leu Thr Tyr Leu Thr Asp Gln Gly Gly
1   5   10   15

Gln Val Ala Leu Leu Ser Ser Phe Pro Pro Cys Gly Asp Ser Gly Ile
            20   25   30

Gln Ala His Ser Ile Thr Arg Leu Ser His Ile Gly Val Phe His Phe
            35   40   45

Gly Asp Glu Asp Glu Gly Glu Ser Gly Arg Glu
    50   55

<210> 110
<211> 91
<212> PRT
<213> Homo sapiens

<400> 110

Met Asp Val Met Gly Lys Leu Lys Gly Ser Cys Asp Glu Thr Gly Ser
1   5   10   15

Glu Asn Ser Asp Gly Asp Leu Ser Lys Val Ile Leu Pro Lys His His
            20   25   30

Leu Ala Ile Met Ile Pro Pro Asn Leu Ser Gln Phe Val Tyr Phe Ile
            35   40   45

Ser Arg Gly Ser Phe Ser Val Leu Ala Ser Cys Val Phe Val Phe Phe
    50   55   60

Phe Phe Ser Val Ile Leu Gln Ala Gln Asp Phe Leu Leu Asp Thr Gly
65   70   75   80

Arg Ile Ser Leu Leu Lys Glu Ala Gly Gly Thr
            85   90

<210> 111
<211> 45
<212> PRT
<213> Homo sapiens

<400> 111

Met Gly His Val Asp Gln Leu Ser Pro Arg Thr Thr Asn Leu Ala Cys
1   5   10   15

Ser Asp Asp Leu Cys Ser Arg Gln Gly Phe Arg Leu Asp Cys Cys Ser
            20   25   30

Ser Leu Trp Arg His Asn Pro Asn Cys Glu Leu Leu Asn
            35   40   45

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<210>  112
<211>  64
<212>  PRT
<213>  Homo sapiens

<400>  112

Met Leu Lys Met Ile Leu Ala Ser Ile Val Ile Asn Ser Val Ile Pro
1               5                   10                  15


Glu Phe Phe Val Ser Pro Arg His Thr Asn Phe Cys Pro Leu Leu Leu
            20                  25                  30


Phe Ser Gln Ser Phe Leu Leu Ala Phe Leu Ser Asn Arg Val Leu Leu
        35                  40                  45


Thr Pro Tyr Ile Pro Phe Trp Leu Val Arg Val Ser Phe Ser Ser Ser
    50                  55                  60


<210>  113
<211>  25
<212>  PRT
<213>  Homo sapiens

<220>
<221>  MISC_FEATURE
<222>  (14)..(14)
<223>  X=any amino acid


<220>
<221>  MISC_FEATURE
<222>  (17)..(17)
<223>  X=any amino acid


<400>  113

Met Leu Leu Phe Thr Lys Leu Leu Ile Ile Met Val Ile Xaa Ile Asn
1               5                   10                  15


Xaa Asn Asn Lys Leu Leu Gln Leu Phe
            20                  25


<210>  114
<211>  57
<212>  PRT
<213>  Homo sapiens

<400>  114

Met Arg Ile Gln Asn Leu Thr Cys Leu Leu Leu Gly Ser Lys Glu Met
1               5                   10                  15
```

Ser Thr Ser Ser Pro Leu Thr Pro Asn Gly Val Glu Gly Phe Gly Pro
            20   25   30

Gln His Cys Val Thr Tyr Ser His His Asp Phe Leu Ala Gln Val Thr
            35   40   45

Pro Ser Val Lys Trp Lys Arg Glu Glu
        50   55

<210> 115
<211> 147
<212> PRT
<213> Homo sapiens

<400> 115

Met Asn Glu Ser Trp Ala Gly Pro Gly Pro Ala Glu Arg Ala Glu Glu
1   5   10   15

Ala Val Ser Gly Val Gly Val Glu Ala Lys Thr Gln His Ala Gly Gln
            20   25   30

Gly Ala Gln Pro Gly Gly Met Gly Cys Gly Phe Ser Ser Gly Pro Ile
            35   40   45

Gly Met Ala Leu Gly Leu Gly Leu Val Gly Thr Ala Ala Thr Arg Gly
        50   55   60

Gly Ser Ser Ala Trp Pro Asp Ser Thr Cys Asn Val Gly Arg Gln Trp
65   70   75   80

Ala Pro Pro Gly Gly Arg Asn Thr Val Arg Ser Met Gln Arg Ala Gly
            85   90   95

Asp His Gly Ala Cys Asp Leu Arg Ala His Pro Gly Gln Thr Trp Val
            100   105   110

Arg Gly Gly Leu Gly Arg Gln Asp Ser Glu Gly Leu Gln Gly Val Phe
            115   120   125

Val Leu Cys Pro Tyr Thr Gly Asp Leu His Gly Arg Val Arg Ser Ile
            130   135   140

Arg Met Leu
145

<210> 116

<211> 73
<212> PRT
<213> Homo sapiens

<400> 116

Met Thr Ile Ser Leu Cys Ala Thr Asn Leu Pro Arg Ala Ala Thr Val
1   5   10   15

Leu Arg Met Lys Pro Lys Leu Pro Gly Ser Gly Pro Val Gln His Glu
            20   25   30

Pro His Leu Pro Ser Gln Pro Gln His Pro Leu Leu Phe Phe Gln Ala
        35   40   45

Gly Gly Lys Leu Glu Ala His Pro His Phe Thr Gln Thr Leu Gly Ile
    50   55   60

Pro Ile Ser Gly Asn Arg Gly Val Phe
65   70

<210> 117
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (46)..(46)
<223> X=any amino acid

<400> 117

Met Tyr Asn Ile Leu Lys Ala Phe Asp Lys Ile Val His Ile Ile Ser
1   5   10   15

Asn Thr Ile Leu Tyr Tyr Tyr Gln Gln His Lys Ala Asn Val Ser Lys
            20   25   30

Asn Ser Arg Leu Arg Ile Ser Lys Asn Ser Pro Arg Ala Xaa Phe Arg
        35   40   45

<210> 118
<211> 38
<212> PRT
<213> Homo sapiens

<400> 118

Met Leu Pro Val Ser Pro Thr Leu Lys Glu Arg Asn Gln Arg Arg Met
1   5   10   15

Leu Leu Lys Ser Thr His Leu Ala Ser Val Ser Ser Ala Ser Cys Thr
            20   25   30

Gln Thr Lys His Thr Gly
        35

<210> 119
<211> 55
<212> PRT
<213> Homo sapiens

<400> 119

Met Lys Ile Phe Ile Ile Ile Leu Ser Pro Leu Cys Gly Ile Leu Leu
1   5   10   15

Asn Val Leu Glu Ser Leu Lys Phe Ile Phe Lys Cys Glu Ser Leu Leu
            20   25   30

Phe Val Trp Gly Glu Glu Cys Gln Val Gly Ile Met Asn Gln Ala Leu
            35   40   45

Pro Tyr Gln Val Leu Leu Tyr
        50   55

<210> 120
<211> 92
<212> PRT
<213> Homo sapiens

<400> 120

Glu Ser His Thr Leu Gln Val Ile Leu Gly Cys Glu Met Gln Glu Asp
1   5   10   15

Asn Ser Thr Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His
            20   25   30

Leu Glu Phe Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg
            35   40   45

Ala Trp Pro Thr Lys Leu Glu Trp Glu Arg His Lys Ile Arg Ala Arg
        50   55   60

Gln Asn Arg Ala Tyr Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln
65   70   75   80

Leu Leu Glu Leu Gly Arg Gly Val Leu Asp Gln Gln
                85   90

<210> 121
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (51)..(72)
<223> X=any amino acid

<400> 121

Met Ile Lys Val Ser Leu Thr Ser Ala Pro Lys Val Ser Ser Leu Glu
1   5   10   15

Gly Thr Asn Arg Arg Glu His Ser Asp Thr Gln Gly Pro Leu Ser Val
            20   25   30

Pro Trp Lys Pro Ser Asp Leu Cys Arg Pro Ile Ser Val Arg Lys Trp
        35   40   45

Val Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    50   55   60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Thr Thr Gln Ser Ser Trp Gln
65   70   75   80

Ile Leu Asn Lys Gly
                85

<210> 122
<211> 20
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> X=any amino acid

<400> 122

Met Gly Gly Ala Trp Ser Ile Ala Gly Pro Leu Thr Gly Phe Xaa Phe
1   5   10   15

Arg Leu Thr Phe
            20

<210> 123

<211> 103
<212> PRT
<213> Homo sapiens

<400> 123

Phe Tyr Phe Leu Phe Ser Phe Val Leu Arg Trp Ser Phe Thr Leu Val
1   5   10   15

Thr Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Ser Leu Gln Pro Pro
            20   25   30

Pro Pro Arg Leu Lys Ala Phe Ser Cys Leu Gly Leu Pro Ser Ser Trp
        35   40   45

Asp Tyr Arg His Ala Leu Gln Arg Pro Ala Asn Phe Ala Phe Leu Val
        50   55   60

Glu Ile Gly Phe His His Val Gly Gln Ala Gly Pro Gln Leu Leu Thr
65   70   75   80

Ser Gly Asp Pro Ser Ile Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly
                85   90   95

Val Thr Ala Val Pro Gly Pro
            100

<210> 124
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (13)..(43)
<223> X=any amino acid

<400> 124

Met Val Val Ile Gln Ala Xaa Glu Glu Glu Lys Thr Xaa Xaa Xaa Xaa
1   5   10   15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            20   25   30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ile Trp Lys Ile Cys
        35   40   45

<210> 125
<211> 95
<212> PRT
<213> Homo sapiens

<400> 125

Met Ser Ser Tyr Met Ile Asn Lys Phe Leu Pro Ile Lys Lys Val Lys
1   5   10   15

Ile Pro Gly His Lys Val Phe Ser Thr Asp Ile Met Phe Leu Lys Phe
            20   25   30

Val Ser Ile Ala Thr Leu Leu Arg Arg His Thr Asp Ile Ser Glu Asp
        35   40   45

Leu Arg Val Leu Gln Asn Thr Glu Lys Ile Ser Arg Arg Lys Gly Lys
    50   55   60

Gly Glu Thr Lys Lys Leu Lys Glu Gly Leu Thr Tyr Lys Trp Asn Asp
65   70   75   80

Leu Lys Arg Asn Gly Glu Pro Gly Glu Thr Gly Val Ser Gln Ser
            85   90   95

<210> 126
<211> 48
<212> PRT
<213> Homo sapiens

<400> 126

Met Ile Lys Tyr Phe Lys Ser Asn Asn Tyr Lys Phe Asn Tyr Tyr Lys
1   5   10   15

Thr Ser Ser Leu Thr Ser Asp Cys Phe Val Leu Ser Phe Lys Ile Ile
            20   25   30

Met Val Cys Leu Arg Val Cys Leu Leu Asn Thr Phe Ala Tyr Leu Pro
            35   40   45

<210> 127
<211> 98
<212> PRT
<213> Homo sapiens

<400> 127

Met Glu Phe Arg Ser Val Ala Gln Val Gly Val Gln Trp Arg Asp Leu
1   5   10   15

Gly Leu Leu Gln Pro Leu Pro Leu Gln Phe Lys Gln Phe Tyr Cys Leu
            20   25   30

Ser Leu Ser Ser Ser Trp Asp Tyr Arg His Ser Pro Pro His Pro Ala
        35   40   45

Asn Phe Leu Tyr Phe Ala Lys Ile Leu Tyr Ile Ala Lys Arg Phe His
    50   55   60

His Val Gly Gln Ala Gly Leu Ala Leu Leu Thr Ser Gly Asp Pro Pro
65   70   75   80

Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His Cys Ala
            85   90   95

Gln Pro

<210>   128
<211>   50
<212>   PRT
<213>   Homo sapiens

<400>   128

Met Gly Lys Arg Arg Asp Ser Trp Thr Asn Arg Glu Arg Gln Leu Glu
1   5   10   15

Asn Lys Ser Met Gln Lys Ile Ile Tyr Asn Lys Ile Met His Leu Thr
            20   25   30

Leu Val Thr Lys Gln Ile Ser Tyr Pro His Phe Ser Leu Ser Val Phe
        35   40   45

Val Ser
    50

<210>   129
<211>   16
<212>   PRT
<213>   Homo sapiens

<400>   129

Met Leu Leu Phe Val Leu Ser Leu Val Phe Gln Tyr Gln Phe Asn Thr
1   5   10   15

<210> 130
<211> 54
<212> PRT
<213> Homo sapiens

<400> 130

Met Ala Leu His Cys Phe Thr Ser Gly Leu Trp Ile Ala Ser Val Arg
1   5   10   15

Lys Lys Val Lys Met Lys Glu Lys Val Glu Gln Ile Leu Ala Thr Glu
            20   25   30

Pro Pro Glu Asp Ser Cys Pro Phe Ser Asn Lys Leu Ser Gly Lys Cys
        35   40   45

Cys Cys His Gly Ser Thr
    50

<210> 131
<211> 41
<212> PRT
<213> Homo sapiens

<400> 131

Met Cys Ala His Lys Gly Lys Ala Met Arg Glu Arg Thr Gln Pro Glu
1   5   10   15

Gly Gly His Leu Ala Ser Gln Gly Glu Ala Leu Arg Glu Thr Lys Pro
            20   25   30

Ala Arg Leu Gly Thr Val Ala His Gly
        35   40

<210> 132
<211> 35
<212> PRT
<213> Homo sapiens

<400> 132

Met Ala Leu Ile Leu Leu Glu Ala Leu Cys Phe Gly Leu Ile Ile Cys
1   5   10   15

Met Asn Arg Glu Ser Ile Ser Thr Leu Ile Phe Tyr Lys His Trp Met
            20   25   30

Ser Ile Leu
        35

<210> 133
<211> 58
<212> PRT
<213> Homo sapiens

<400> 133

Met Phe Asn Ala Tyr Leu Leu Tyr Asn Asn Gln Val Ile Thr Val Gln
1   5   10   15

Ile Lys Gly Pro Lys Cys Phe Arg Tyr Asp Ile Ile Leu Ser Ile Val
                20   25   30

Asn Trp Thr Lys Glu Thr Leu Tyr Val Gln Gly Ser Val Glu Gln Pro
            35   40   45

Trp Cys Ser Trp Asp Met Leu Pro Arg Cys
        50   55

<210> 134
<211> 27
<212> PRT
<213> Homo sapiens

<400> 134

Met Met Lys Leu Cys Phe Thr Ala Ser Leu Leu His Gly Ala Leu Leu
1   5   10   15

Trp His Leu Ala Thr Thr Asn Ser Leu Ile Pro
                20   25

<210> 135
<211> 46
<212> PRT
<213> Homo sapiens

<400> 135

Met Glu Leu Pro Ser Met Cys Pro Ile Leu Phe Phe Val Thr Val Phe
1   5   10   15

Phe Met Tyr His Thr Pro Ser Cys Pro Ser Ser Val Pro Gln Thr His
                20   25   30

Gln Ser His Phe Leu Leu Thr Ala Leu Gly Leu Ala Leu Thr
            35   40   45

<210> 136
<211> 77
<212> PRT

<213> Homo sapiens

<400> 136

Met Thr Cys Pro Gly Gly Glu Thr Gly Trp Gly Cys Leu Arg Met Asp
1   5   10   15

Pro Arg Glu Trp Val Ser Ser Pro Asp Gln Gln Asn Leu Arg Met Cys
            20   25   30

Ala Trp Ile Gln Pro His Leu Lys Leu Gly Leu His Phe Val Ser Gly
        35   40   45

Ala Pro Asn Ala Leu Cys Leu Gly Cys Leu Tyr Ser Trp His Thr Gly
    50   55   60

Glu Ala Leu Ser Pro Ala Gly Pro Gly Cys Cys Cys Ser
65   70   75

<210> 137
<211> 37
<212> PRT
<213> Homo sapiens

<400> 137

Met Glu Gln Glu Ser Val Pro Ser Met Ser Leu Phe Thr Arg Ile Leu
1   5   10   15

Ser Gln Pro Ser Leu Phe Pro Trp Gln Ala Leu His Arg Glu Thr Gly
            20   25   30

Lys Arg Ser Thr Val
        35

<210> 138
<211> 59
<212> PRT
<213> Homo sapiens

<400> 138

Met Leu Leu Pro Leu Pro Ala Ile Ser Phe Pro Cys Asn Ser Leu Phe
1   5   10   15

His Pro Ala Asp Ala Ser Ser Leu Ser Trp Leu Ser Ser Lys Ser Tyr
            20   25   30

Pro Leu Gly Lys Leu Thr Arg Met Leu Gln Ser Asp Gly Val Ser Pro
        35   40   45

Pro Gly Pro Pro Gln Thr Leu Tyr Phe Leu Leu
    50   55

<210> 139
<211> 50
<212> PRT
<213> Homo sapiens

<400> 139

Met Asp Asn Lys Cys Leu Thr Leu Thr Asn Tyr Leu Ala Ile Met Gly
1   5   10   15

Phe Phe Asp Gln Lys Ser Ser Lys Arg Val Trp Trp Gly Leu Arg Asp
            20   25   30

Pro Ser Ser Leu Pro Lys Asn Met Lys Ser Phe His Phe Gln Tyr Val
            35   40   45

Lys Thr
    50

<210> 140
<211> 72
<212> PRT
<213> Homo sapiens

<400> 140

Met Arg Val Val Phe Lys Ile Thr Phe Cys Arg Val Val Cys Ser Thr
1   5   10   15

Leu Met Leu Lys Gly Ser His Leu Pro Gln Pro Ile Lys Leu Cys Cys
            20   25   30

Leu Cys Ser Ala Phe Tyr His Lys Asn Met Thr Phe Lys His Lys Asn
            35   40   45

Thr Leu Tyr Ser Thr Thr Lys Asn Arg Asn Asp Ile Tyr Leu His Cys
    50   55   60

Phe Pro Ile Ser Leu His Leu Tyr
65   70

<210> 141
<211> 863
<212> PRT
<213> Homo sapiens

<400> 141

Met Pro Glu Gln His Lys Asp Pro Arg Val Gln Glu Asn Pro Asp Asp
1   5   10   15

Gln Arg Thr Val Pro Glu Val Thr Gly Asp Ala Arg Ser Ala Phe Trp
        20   25   30

Pro Leu Arg Asp Asn Gly Gly Pro Ser Pro Phe Val Pro Arg Pro Gly
        35   40   45

Pro Leu Gln Thr Asp Leu His Ala Gln Ser Ser Glu Ile Arg Tyr Asn
        50   55   60

His Thr Ser Gln Thr Ser Trp Thr Ser Ser Ser Thr Lys Arg Asn Ala
65   70   75   80

Ile Ser Ser Ser Tyr Ser Ser Thr Gly Gly Leu Pro Gly Leu Lys Gln
            85   90   95

Arg Arg Gly Pro Ala Ser Ser Arg Cys Gln Leu Thr Leu Ser Tyr Ser
        100   105   110

Lys Thr Val Ser Glu Asp Arg Pro Gln Ala Val Ser Ser Gly His Thr
        115   120   125

Arg Cys Glu Lys Gly Ala Asp Thr Ser Pro Gly Gln Thr Ile Ala Pro
    130   135   140

Thr Gly Gly Ser Pro Arg Ser His Asp Ser Arg Pro Arg Arg Arg Lys
145   150   155   160

Ile Pro Leu Leu Pro Arg Arg Arg Gly Glu Pro Leu Met Leu Pro Pro
            165   170   175

Pro Leu Glu Leu Gly Tyr Arg Val Thr Ala Glu Asp Leu His Leu Glu
        180   185   190

Lys Glu Thr Ala Phe Gln Arg Ile Asn Ser Ala Leu His Val Glu Asp
        195   200   205

Lys Ala Ile Pro Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser
    210   215   220

Ser Leu Ala Thr Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro
225   230   235   240

Thr Met Asp Ala Gln Gln Asp Arg Pro Lys Ser Gln Asp Cys Leu Gly
             245   250   255

Leu Val Ala Pro Leu Ala Ser Ala Ala Glu Val Pro Ala Thr Ala Pro
             260   265   270

Val Ser Gly Lys Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser
             275   280   285

Asp Pro Leu Pro Ala Asn Ser Ser His Ser Arg Asp Ser Ala Gln Val
     290   295   300

Thr Ser Met Ile Pro Ala Pro Phe Thr Ala Ala Ser Arg Asp Ala Gly
305   310   315   320

Met Arg Arg Thr Arg Ser Ala Pro Ala Ala Ala Ala Ala Ala Pro Pro
             325   330   335

Pro Ser Thr Leu Asn Pro Thr Ser Gly Ser Leu Leu Asn Ala Val Asp
             340   345   350

Gly Gly Pro Ser His Phe Leu Ala Ser Ala Thr Ala Ala Ala Arg Ala
             355   360   365

Gln Arg Ser Glu Val Arg Tyr Asn Gln Arg Ser Gln Thr Ser Arg Thr
             370   375   380

Arg Ser Cys Leu Lys Arg Asn Ala Ser Ser Ser His Ser Ser Thr
385   390   395   400

Glu Gly Leu Gln Glu Val Lys Arg Arg Arg Gly Pro Ala Ser Ser His
             405   410   415

Cys Gln Leu Ala His Ser Ser Ser Asn Thr Val Ser Glu Asp Gly Pro
             420   425   430

Gln Ala Val Ser Ser Gly His Arg Cys Glu Asn Lys Ala Gly Thr Ala
             435   440   445

Pro Gly Gln Thr Leu Ala Pro Arg Gly Gly Ser Pro Arg Ser Gln Ala
     450   455   460

Ser Arg Pro His Ile Asn Thr Ala Leu His Val Glu Asp Lys Ala Ile
465   470   475   480

Ser Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser Ser Leu Ala

```
                485                    490                    495


Thr Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro Thr Met Asp
            500             505             510


Ala Gln Gln Asp Arg Pro Lys Ser Gln Asp Ser Leu Gly Leu Leu Ala
            515             520             525


Pro Leu Ala Ser Ala Ala Glu Val Pro Ser Thr Ala Pro Val Ser Gly
        530             535             540


Lys Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser Asp Pro Leu
545             550             555             560


Pro Ala Thr Ser Tyr His Ser Arg Asp Thr Ala Gln Val Thr Ser Leu
                565             570             575


Ile Pro Ala Thr Phe Thr Ala Ala Ser Arg Asp Ala Gly Met Arg Arg
            580             585             590


Thr Arg Ser Ala Pro Ala Ala Ala Thr Ala Ala Pro Pro Pro Ser Thr
        595             600             605


Leu Asn Asn Thr Ser Gly Ser Leu Leu Asn Ala Val Asp Gly Gly Pro
    610             615             620


Ser His Phe Leu Ala Ser Ala Thr Ala Ala Ala Arg Ala Gln Arg Ser
625             630             635             640


Glu Val Arg Tyr Asn Gln Arg Ser Gln Thr Ser Arg Thr Arg Ser Cys
                645             650             655


Leu Lys Arg Asn Ala Ser Ser Ser Ser Ser Ser His Ser Ser Thr Glu
            660             665             670


Gly Leu Gln Glu Val Lys Arg Arg Arg Gly Pro Ala Ser Ser His Cys
        675             680             685


Gln Leu Ala His Ser Ser Ser Asn Thr Val Ser Glu Asp Gly Pro Gln
    690             695             700


Ala Val Ser Ser Gly His Arg Cys Glu Asn Lys Ala Gly Thr Ala Pro
705             710             715             720


Gly Gln Thr Leu Ala Pro Arg Gly Gly Ser Pro Arg Ser Gln Ala Ser
            725             730             735
```

Arg Pro His Ile Asn Ser Ala Leu His Val Glu Asp Lys Ala Ile Ser
             740   745   750

Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser Ser Leu Ala Thr
         755   760   765

Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro Thr Met Asp Ala
     770   775   780

Gln Gln Asp Arg Pro Lys Ser Gln Asp Cys Leu Gly Leu Leu Ala Pro
785   790   795   800

Leu Ala Ser Ala Ala Glu Val Phe Ser Thr Ala Pro Val Ser Gly Lys
             805   810   815

Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser Asp Pro Leu Pro
         820   825   830

Ala Thr Ser Ser His Ser Gly Asp Ser Ala Gln Asp Thr Ser Leu Ile
         835   840   845

Pro Ala Pro Phe Thr Pro Ala Ser Arg Asp Ala Gly Ile Arg Arg
     850   855   860

<210>   142
<211>   29
<212>   PRT
<213>   Homo sapiens

<400>   142

Met Ser Tyr Leu Ser Leu Leu Leu Ile Ser Ile Phe Met Val Cys Tyr
1   5   10   15

Phe Lys Arg Asn Ser Phe Pro Ile Thr Ile Leu Phe Ser
             20   25

<210>   143
<211>   32
<212>   PRT
<213>   Homo sapiens

<400>   143

Met Pro Trp Pro Met Pro Ile Cys Thr Gly Thr Gln Gly Val Leu Thr
1   5   10   15

His Arg Gln Gly Pro Pro Pro Ala Ala Val Gly Val Ser Pro His Thr

20   25   30

<210> 144
<211> 29
<212> PRT
<213> Homo sapiens

<400> 144

Met Asn Ala Phe Leu Leu Glu Arg Met Thr Glu Ser Gln Ala Met Asp
1   5   10   15

Ile Gln Thr Cys Ile Phe Gln Thr Leu Leu Glu Asn Lys
            20   25

<210> 145
<211> 48
<212> PRT
<213> Homo sapiens

<400> 145

Met Ile Val Thr Asn Thr Ile Leu Lys Phe Ile His Lys Lys Pro Thr
1   5   10   15

Thr Ile Thr Pro Thr Lys Gln His Gly Ile Ile Phe Ser Val Pro Glu
            20   25   30

Ala Lys Val Arg Ala Leu Leu Cys Phe Leu Leu Arg Met Pro Ser Pro
        35   40   45

<210> 146
<211> 55
<212> PRT
<213> Homo sapiens

<400> 146

Gly Gln Ala Leu Trp Leu Met Pro Val Ile Pro Val Val Ala Lys Ala
1   5   10   15

Glu Gly Lys Asp His Leu Arg Pro Gly Val Ala Asn Gln Pro Gly Gln
            20   25   30

His Ser Lys Thr Leu Phe Leu Gln Lys Lys Asn Phe Ala Lys Leu Ala
        35   40   45

Glu His Gly Gly Ala Cys Leu
    50   55

<210> 147

<211> 55
<212> PRT
<213> Homo sapiens

<400> 147

Met Ser Arg Phe Arg Ile Gln Thr Ser Glu Thr Ala Pro Ile Pro Leu
1   5   10   15

Val Ser His Pro His Thr Pro Leu Ser Asn Asn Asn Asn Leu His Leu
            20   25   30

Gly Asn Val Cys Tyr Val Pro Gly His Thr Gly Ile Ile Ser Cys Thr
            35   40   45

Pro His Arg His Leu Ile Lys
        50   55

<210> 148
<211> 50
<212> PRT
<213> Homo sapiens

<400> 148

Met Gln Gly Leu His Leu Pro Gln Gly Leu Gly Thr Cys Tyr Ser Ile
1   5   10   15

Cys Leu Gln Cys Leu Ser Pro His Gly Tyr Phe Phe Val Ala Val Gly
            20   25   30

Leu Ser Ser Asn Val Met Ser Pro Thr Ser Leu Pro Lys Ala Val Leu
            35   40   45

Pro Thr
    50

<210> 149
<211> 31
<212> PRT
<213> Homo sapiens

<400> 149

Met Leu Pro Val Asn Ile Ser His Pro Leu Ser Arg Gly Asn Pro Leu
1   5   10   15

Leu Ser Ser Lys Phe Ser Lys Phe Phe Leu Ile Glu Phe Ser Gln
            20   25   30

<210> 150

<211> 36
<212> PRT
<213> Homo sapiens

<400> 150

Met Asp Tyr Ser Leu Ser Phe Asp Asn Tyr Thr Trp Gly Phe Gly Glu
1   5   10   15

Pro Arg Ile Lys Val Gln Ser Phe Asn Asp Leu Leu Ala Pro Gly Leu
                20   25   30

Thr Gln Glu His
            35

<210> 151
<211> 85
<212> PRT
<213> Homo sapiens

<400> 151

Met Ile Arg Ser Lys Gly Thr Asn Phe Gln Ile Leu Ala Glu Leu Phe
1   5   10   15

Lys Gly Met Asp Phe Leu Trp Leu Gln Leu Ala Arg Leu Phe Gln Lys
                20   25   30

Ala Cys Pro Trp Leu Thr Ala Cys Leu Ala Gln Phe Leu Arg Ser Pro
            35   40   45

Leu Val Met Glu Asn Arg Ala Asp Arg Ile Gln Met Ala Arg Phe His
    50   55   60

Arg Gly Gln Gly Gly Pro Gln Ser Ala Asn Gln Gly Arg Leu Arg Pro
65   70   75   80

Glu Lys Gly Ile Ser
                85

<210> 152
<211> 73
<212> PRT
<213> Homo sapiens

<400> 152

Met Asp Arg Phe Leu Asn Ser Lys Ala Arg Arg Leu Gly Ser Cys Ser
1   5   10   15

His Pro Ala Phe Tyr Leu Leu Cys Val Pro Asp Glu Asp Thr Ser Cys

```
                20                      25                      30

Ser Thr Met Tyr Leu Pro Leu Lys Arg Arg Ala Asp Pro Asp Gln Leu
        35                  40                  45


Phe Ser Asp Leu Leu Gly Gly Thr Gln Arg Leu Trp Arg Leu Trp Pro
    50                  55                  60


Ser Leu Ala Ser Val Glu Ser Gly Leu
65                  70
```

<210> 153
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (5)..(43)
<223> X=any amino acid

<400> 153

```
Met Gln Cys Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1               5                   10                  15


Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            20                  25                  30


Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Ile Lys Phe Gly
        35                  40                  45


Met Lys Gln Glu Leu Ser Trp Thr Ile Tyr Asn Leu Leu Arg Tyr
    50                  55                  60
```

<210> 154
<211> 46
<212> PRT
<213> Homo sapiens

<400> 154

```
Met Arg Cys Leu Leu Ala Asp Ser Ser Leu Gln Met Gln Pro Gly Asp
1               5                   10                  15


Val Thr Leu Arg Leu Glu Ser Cys Gly Ser Asn Pro Arg Gln Arg Gln
            20                  25                  30


Leu His Gln Val Leu Val Trp Val Arg Asn Arg Gly Lys Gly
        35                  40                  45
```

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<210>   155
<211>   72
<212>   PRT
<213>   Homo sapiens

<220>
<221>   MISC_FEATURE
<222>   (22)..(22)
<223>   X=any amino acid


<400>   155

Met Pro Pro Arg Gly Trp Ala Cys Pro Ser Ser Gly Pro Pro Ala Pro
1               5                   10                  15


Gly Pro Gly Arg Trp Xaa Arg Ala Ala Ala Gly Gly Leu Arg Arg Thr
            20                  25                  30


Arg Cys Asp Trp Leu Pro Leu Arg Arg Thr Gln Met Ser Leu Arg Arg
        35                  40                  45


Ile Asp Leu Leu Pro Ser Pro Ala Gly Gln Ala Gln Ala Gly Ser Glu
    50                  55                  60


Asn Tyr Leu Pro Leu Phe Ile Ser
65                  70


<210>   156
<211>   20
<212>   PRT
<213>   Homo sapiens

<220>
<221>   MISC_FEATURE
<222>   (10)..(10)
<223>   X=any amino acid


<220>
<221>   MISC_FEATURE
<222>   (13)..(14)
<223>   X=any amino acid


<220>
<221>   MISC_FEATURE
<222>   (16)..(16)
<223>   X=any amino acid


<220>
<221>   MISC_FEATURE
<222>   (20)..(20)
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<223> X=any amino acid

<400> 156

Met Val Phe Ile Phe Ser Thr Thr Ile Xaa Phe Phe Xaa Xaa Glu Xaa
1   5   10   15

Glu Ser Cys Xaa
            20

<210> 157
<211> 66
<212> PRT
<213> Homo sapiens

<400> 157

Met Ser Leu Thr Tyr Ser Trp Lys Lys Ser Lys Val Thr Lys Phe Asn
1   5   10   15

Leu Ser Thr Leu Arg Met Thr Val Thr Asn Lys Asn Arg Thr Val Gln
            20   25   30

Lys Cys Ala Lys Asp Thr Arg Lys Leu Asn Asn Ile Asn Ser Met Ile
        35   40   45

Ile Val Ile Leu Tyr Thr Met Glu Ser Lys Gln Ile Phe Phe His Gly
    50   55   60

Asn Ser
65

<210> 158
<211> 41
<212> PRT
<213> Homo sapiens

<400> 158

Met Met Thr Gly Glu Ala Arg Glu Ser Gln Ile Ala Leu Tyr Lys Gln
1   5   10   15

Arg Phe Arg Glu Phe Arg Glu Glu Gly Arg Thr Ile Tyr Lys Gly Arg
            20   25   30

Trp Lys Arg Ser His Leu Ala Glu Gly
        35   40

<210> 159
<211> 31

<212>   PRT
<213>   Homo sapiens

<220>
<221>   MISC_FEATURE
<222>   (7)..(7)
<223>   X=any amino acid

<400>   159

Met Leu Glu Leu Gly Leu Xaa Pro Lys Leu Thr Ser Glu Tyr Arg Phe
1   5   10   15

Pro Pro Asn Cys Met Ile Leu His Ile Trp Ser Gln Leu Glu Val
            20   25   30

<210>   160
<211>   75
<212>   PRT
<213>   Homo sapiens

<400>   160

Met Tyr Ile Tyr Ile Cys His His Phe Lys Asn Gln Ala Phe Lys Val
1   5   10   15

Lys Leu Ser Phe Pro His Ile Phe Phe His Ser Ile Phe Tyr Gln Tyr
            20   25   30

Arg His Ser Leu Leu Leu Leu Ser Phe Gln Phe Pro Ile Ile Ser Ser
        35   40   45

His Pro Ile Phe Cys Ala Ser Ser Val Phe Lys Thr His Ser Pro Ser
    50   55   60

Ala Ala Met Ala Pro Thr Ile Ile Phe Ile Thr
65   70   75

<210>   161
<211>   36
<212>   PRT
<213>   Homo sapiens

<220>
<221>   MISC_FEATURE
<222>   (7)..(13)
<223>   X=any amino acid

<400>   161

Met Lys Arg Gly Asn Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Thr Pro
1   5   10   15

Cys Lys Asp Trp Ser His Thr Ala Met Ser Gln Glu Pro Pro Val Leu
            20   25   30

Val Arg Val Leu
        35

```
<210>  162
<211>  24
<212>  PRT
<213>  Homo sapiens

<220>
<221>  MISC_FEATURE
<222>  (9)..(9)
<223>  X=any amino acid

<220>
<221>  MISC_FEATURE
<222>  (20)..(20)
<223>  X=any amino acid

<400>  162
```

Met Trp Ala Ala Trp Arg Arg Arg Xaa Asn Gly Phe Phe Pro Arg Ile
1   5   10   15

Pro Gly Lys Xaa Arg Gly Pro Asn
        20

```
<210>  163
<211>  31
<212>  PRT
<213>  Homo sapiens

<400>  163
```

Met Cys His Ser Leu Tyr Arg Phe Leu Asn Cys His Ser Arg Tyr Tyr
1   5   10   15

Ile Val Tyr Thr Tyr Leu Thr Ile Phe Tyr Trp Cys His His Phe
            20   25   30

```
<210>  164
<211>  134
<212>  PRT
<213>  Homo sapiens

<220>
<221>  MISC_FEATURE
<222>  (2)..(22)
<223>  X=any amino acid
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<220>
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<222> (39)..(67)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (79)..(113)
<223> X=any amino acid

<400> 164

Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1   5   10   15

Xaa Xaa Xaa Xaa Xaa Xaa Ala Gly Lys Arg Glu Asn Gln Lys Asp Ser
            20   25   30

Ser Val Arg Arg Thr Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            35   40   45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
        50   55   60

Xaa Xaa Xaa Arg Phe Ser Pro Arg Ala Tyr Arg Lys Lys Val Xaa Xaa
65   70   75   80

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            85   90   95

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            100   105   110

Xaa Arg His Asn Arg Lys Leu Ile His Leu Ser Ser Lys Phe Leu Ile
        115   120   125

Ile Asn Val Ile Ala Ser
        130

<210> 165
<211> 51
<212> PRT
<213> Homo sapiens

<400> 165

Met Ser Lys Val Asp Leu Phe Ile Thr Asp Ser Phe Lys Lys Phe Asn
1   5   10   15

```
Gln Tyr Leu Leu Ala Thr Tyr Ser Thr Ser Gly Thr Gln Gly Ile Trp
            20                  25                  30


Ser Thr Thr Met Lys Lys Arg Asp Trp Thr Leu Lys Glu His Arg Ser
        35                  40                  45


Cys His Phe
    50
```

<210> 166
<211> 60
<212> PRT
<213> Homo sapiens

<400> 166

```
Met Ser Asp Ser Arg Leu Cys Ser Cys Phe Leu His Thr Leu Ile Phe
1                   5                   10                  15


Leu Asn Ile Ser Lys Ile Gln Ser Gly Ser Lys Ile Thr Cys Lys Asn
            20                  25                  30


Ile Leu Ala Gln Glu Phe Asp Arg Leu Lys Ile Asn Tyr Leu Lys Tyr
        35                  40                  45


Ile Lys Gln Glu Val Tyr Leu Leu Tyr Ser Met Tyr
    50                  55                  60
```

<210> 167
<211> 15
<212> PRT
<213> Homo sapiens

<400> 167

```
Met Val Phe Gln Lys Thr Ser Leu Tyr Ser Asn Asn Ile Leu Leu
1                   5                   10                  15
```

<210> 168
<211> 106
<212> PRT
<213> Homo sapiens

<400> 168

```
Cys Pro Ala Ala Tyr Thr Val Phe Leu Thr Arg Ile Ile Val Lys Tyr
1                   5                   10                  15


Tyr Leu Asn Arg Gly Leu Phe Ser Glu Thr Pro Ser Asn Leu Lys Val
            20                  25                  30
```

Glu Glu Lys Gly Trp Val Trp Trp Leu Met Pro Val Thr Pro Ala Leu
    35   40   45

Trp Glu Ala Glu Ala Gly Gly Ser Leu Glu Leu Ser Leu Arg Pro Gly
    50   55   60

Trp Ala Thr Pro Ser Leu Pro Lys Asn Thr Lys Met Ser Gln Ala Trp
65   70   75   80

Trp Cys Thr Pro Val Val Pro Ala Ala Leu Gly Ala Glu Val Gly Gly
          85   90   95

Arg Leu Gly Pro Arg Arg Trp Arg Leu Gln
          100   105

<210> 169
<211> 19
<212> PRT
<213> Homo sapiens

<400> 169

Met Gly Pro Asp Arg Leu Lys Gln Lys Ser Asn Thr Ala Val Val Ser
1   5   10   15

Arg Trp Ile

<210> 170
<211> 47
<212> PRT
<213> Homo sapiens

<220>
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<222> (3)..(4)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> X=any amino acid

<400> 170

Met Asp Xaa Xaa Lys Trp Arg Met Arg Arg Gln Pro Xaa Ile Asn Xaa
1   5   10   15

Met Tyr Gln Thr Val Thr Ile Cys Glu Glu Tyr Cys Val Tyr Thr Asn
        20   25   30

Arg Lys Gln Leu Lys Ala Phe Asn Met Cys Gly Trp Gly Glu Arg
        35   40   45

<210> 171
<211> 197
<212> PRT
<213> Homo sapiens

<400> 171

Gln Glu Ala Gln Ile Met Lys Lys Leu Arg His Asp Lys Leu Val Pro
1   5   10   15

Leu Tyr Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr Glu Phe
        20   25   30

Met Ser Lys Gly Ala Tyr Ser Leu Ser Ile Arg Asp Trp Asp Glu Ile
        35   40   45

Arg Gly Asp Asn Val Lys His Tyr Lys Ile Arg Lys Leu Asp Asn Gly
    50   55   60

Gly Tyr Tyr Ile Thr Thr Arg Ala Gln Phe Asp Thr Leu Gln Lys Leu
65   70   75   80

Val Lys His Tyr Thr Glu His Ala Asp Gly Leu Cys His Lys Leu Thr
            85   90   95

Thr Val Cys Pro Thr Val Lys Pro Gln Thr Gln Gly Leu Ala Lys Asp
            100   105   110

Ala Trp Glu Ile Pro Arg Glu Ser Leu Arg Leu Glu Val Lys Leu Gly
        115   120   125

Gln Gly Cys Phe Gly Glu Val Trp Met Gly Thr Trp Asn Gly Thr Thr
        130   135   140

Lys Val Ala Ile Lys Thr Leu Lys Pro Gly Thr Met Met Pro Glu Ala
145   150   155   160

Phe Leu Gln Glu Ala Gln Ile Met Lys Lys Leu Arg His Asp Lys Leu

```
                 165                  170                    175

Val Pro Leu Tyr Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr
            180                 185                 190


Glu Phe Met Ser Lys
            195



<210>  172
<211>  59
<212>  PRT
<213>  Homo sapiens

<220>
<221>  MISC_FEATURE
<222>  (28)..(49)
<223>  X=any amino acid


<400>  172

Met Cys Ile Met His Ile Asn Thr Phe Asn Leu Cys Asn His Leu Met
1               5                   10                  15


Arg Trp Leu Leu Leu Lys Ser Pro Leu Cys Thr Xaa Xaa Xaa Xaa Xaa
            20                  25                  30


Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            35                  40                  45


Xaa Gln Lys Pro Lys Pro Thr Val His Gly Ile
        50                  55



<210>  173
<211>  56
<212>  PRT
<213>  Homo sapiens

<220>
<221>  MISC_FEATURE
<222>  (14)..(21)
<223>  X=any amino acid


<400>  173

Met Lys Pro Ile Arg Gln Leu Val Pro Phe Thr Leu Glu Xaa Xaa Xaa
1               5                   10                  15


Xaa Xaa Xaa Xaa Xaa Leu Tyr Leu Glu His Leu Thr Cys Arg Lys Arg
            20                  25                  30
```

Arg Gly Lys Thr Phe Leu Gly Lys Arg Lys Ala Val Ala Val Pro Lys
        35   40   45

Ser Lys His Phe Trp Gln Gly Phe
    50   55

<210> 174
<211> 104
<212> PRT
<213> Homo sapiens

<400> 174

Met Leu Lys His Leu Gln Val Leu Asp Leu His Gln Cys Ser Leu Thr
1   5   10   15

Ala Asp Asp Val Met Ser Leu Thr Gln Val Ile Pro Leu Leu Ser Asn
        20   25   30

Leu Gln Glu Leu Asp Leu Ser Ala Asn Lys Lys Met Gly Ser Ser Ser
        35   40   45

Glu Asn Leu Leu Ser Arg Leu Arg Phe Leu Pro Ala Leu Lys Ser Leu
    50   55   60

Val Ile Asn Asn Cys Ala Leu Glu Ser Glu Thr Phe Thr Ala Leu Ala
65   70   75   80

Glu Ala Ser Val His Leu Ser Ala Leu Glu Val Phe Asn Leu Ser Trp
            85   90   95

Glu Gln Val Cys Trp Trp Ala Thr
            100

<210> 175
<211> 490
<212> PRT
<213> Homo sapiens

<400> 175

Met Ser Gln Thr Arg Lys Lys Thr Ser Ser Glu Gly Glu Thr Lys Pro
1   5   10   15

Gln Thr Ser Thr Val Asn Lys Phe Leu Arg Gly Ser Asn Ala Glu Ser
        20   25   30

Arg Lys Glu Asp Asn Asp Leu Lys Thr Ser Asp Ser Gln Pro Ser Asp
        35   40   45

Trp Ile Gln Lys Thr Ala Thr Ser Glu Thr Ala Lys Pro Leu Ser Ser
    50   55   60

Glu Met Glu Trp Arg Ser Ser Met Glu Lys Asn Glu His Phe Leu Gln
65   70   75   80

Lys Leu Gly Lys Lys Ala Val Asn Lys Cys Leu Asp Leu Asn Asn Cys
                85   90   95

Gly Leu Thr Thr Ala Asp Met Lys Glu Met Gly Glu Ala Phe Glu Met
            100   105   110

Ile Pro Glu Leu Glu Glu Leu Asn Leu Ser Trp Asn Ser Lys Val Gly
        115   120   125

Gly Asn Leu Pro Leu Ile Leu Gln Lys Phe Gln Lys Gly Ser Lys Ile
    130   135   140

Gln Met Ile Glu Leu Val Ala Cys Ser Leu Thr Ser Glu Asp Gly Thr
145   150   155   160

Phe Leu Gly Gln Leu Leu Pro Met Leu Gln Ser Leu Glu Val Leu Asp
            165   170   175

Leu Ser Ile Asn Arg Asp Ile Val Gly Ser Leu Asn Ser Ile Ala Gln
            180   185   190

Gly Leu Lys Ser Thr Ser Asn Leu Lys Val Leu Lys Leu His Ser Cys
    195   200   205

Gly Leu Ser Gln Lys Ser Val Lys Ile Leu Asp Ala Ala Phe Arg Tyr
    210   215   220

Leu Gly Glu Leu Arg Lys Leu Asp Leu Ser Cys Asn Lys Asp Leu Gly
225   230   235   240

Gly Gly Phe Glu Asp Ser Pro Ala Gln Leu Val Met Leu Lys His Leu
            245   250   255

Gln Val Leu Asp Leu His Gln Cys Ser Leu Thr Ala Asp Asp Val Met
            260   265   270

Ser Leu Thr Gln Val Ile Pro Leu Leu Ser Asn Leu Gln Glu Leu Asp
        275   280   285

Leu Ser Ala Asn Lys Lys Met Gly Ser Ser Ser Glu Asn Leu Leu Ser
    290   295   300

Arg Leu Arg Phe Leu Pro Ala Leu Lys Ser Leu Val Ile Asn Asn Cys
305   310   315   320

Ala Leu Glu Ser Glu Thr Phe Thr Ala Leu Ala Glu Ala Ser Val His
            325   330   335

Leu Ser Ala Leu Glu Val Phe Asn Leu Ser Trp Asn Lys Cys Val Gly
            340   345   350

Gly Asn Leu Lys Leu Leu Leu Glu Thr Leu Lys Leu Ser Met Ser Leu
        355   360   365

Gln Val Leu Arg Leu Ser Ser Cys Ser Leu Val Thr Glu Asp Val Ala
    370   375   380

Leu Leu Ala Ser Val Ile Gln Thr Gly His Leu Ala Lys Leu Gln Lys
385   390   395   400

Leu Asp Leu Ser Tyr Asn Asp Ser Ile Cys Asp Ala Gly Trp Thr Met
            405   410   415

Phe Cys Gln Asn Val Arg Phe Leu Lys Glu Leu Ile Glu Leu Asp Ile
            420   425   430

Ser Leu Arg Pro Ser Asn Phe Arg Asp Cys Gly Gln Trp Phe Arg His
        435   440   445

Leu Leu Tyr Ala Val Thr Lys Leu Pro Gln Ile Thr Glu Ile Gly Met
    450   455   460

Lys Arg Trp Ile Leu Pro Ala Ser Gln Glu Glu Glu Leu Glu Cys Phe
465   470   475   480

Asp Gln Asp Lys Lys Lys Lys His Ser Leu
            485   490

<210> 176
<211> 136
<212> PRT
<213> Homo sapiens

<400> 176

Met His Leu Leu Ser Asp Gly Lys Glu Gly Ser Thr Tyr Lys Pro Phe
1   5   10   15

Gln Glu Ile Ser Ser Ser Ser Lys Ser Gly Arg Lys Gly Ser Lys Ala
            20   25   30

Thr Ile Ser Phe Met Ser Ala Val Val Asn Pro Gln Leu Phe Lys Ser
            35   40   45

Arg His Leu Leu Thr Ala Phe Leu Pro Ser Phe Cys Arg Lys Cys Ser
        50   55   60

Phe Phe Ser Ile Leu Asp Leu His Ser Ile Ser Glu Leu Arg Gly Leu
65   70   75   80

Ala Val Ser Glu Val Ala Val Phe Cys Ile Gln Ser Leu Gly Trp Glu
                85   90   95

Ser Leu Val Leu Arg Ser Leu Ser Ser Phe Leu Leu Ser Ala Leu Glu
            100   105   110

Pro Leu Arg Asn Leu Leu Thr Val Glu Val Trp Gly Leu Val Ser Pro
        115   120   125

Ser Glu Glu Val Phe Phe Leu Val
    130   135